Biomedical Sciences
Graduate Program

Student Handbook
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Integrated Biomedical Science Student Organization</td>
<td>5</td>
</tr>
<tr>
<td>Bennett Society</td>
<td>5</td>
</tr>
<tr>
<td>OSUMC Research Day</td>
<td>5</td>
</tr>
<tr>
<td>Registration and Scheduling</td>
<td>6</td>
</tr>
<tr>
<td>Student First Year Advisor</td>
<td>6</td>
</tr>
<tr>
<td>Buckeye Link (course registration)</td>
<td>6</td>
</tr>
<tr>
<td>Course Load</td>
<td>6</td>
</tr>
<tr>
<td>I.D. Card Processing/Replacement</td>
<td>6</td>
</tr>
<tr>
<td>iTunes U</td>
<td>7</td>
</tr>
<tr>
<td>Employment</td>
<td>8</td>
</tr>
<tr>
<td>Graduate Associates</td>
<td>8</td>
</tr>
<tr>
<td>Direct Deposit</td>
<td>8</td>
</tr>
<tr>
<td>Fee Waivers</td>
<td>8</td>
</tr>
<tr>
<td>Residency</td>
<td>8</td>
</tr>
<tr>
<td>Benefits</td>
<td>8</td>
</tr>
<tr>
<td>Athletic Ticket Office</td>
<td>8</td>
</tr>
<tr>
<td>CABS (Campus Area Bus Service)</td>
<td>8</td>
</tr>
<tr>
<td>Campus PARC</td>
<td>8</td>
</tr>
<tr>
<td>COTA Buses</td>
<td>8</td>
</tr>
<tr>
<td>Credit Union</td>
<td>9</td>
</tr>
<tr>
<td>Council of Graduate Students</td>
<td>9</td>
</tr>
<tr>
<td>Dental Care</td>
<td>9</td>
</tr>
<tr>
<td>Disability Services</td>
<td>9</td>
</tr>
<tr>
<td>Environmental Health and Safety (EHS)</td>
<td>9</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>9</td>
</tr>
<tr>
<td>Food Services</td>
<td>9</td>
</tr>
<tr>
<td>Graduate School</td>
<td>9</td>
</tr>
<tr>
<td>Lantern</td>
<td>10</td>
</tr>
<tr>
<td>Libraries</td>
<td>10</td>
</tr>
<tr>
<td>Lost and Found</td>
<td>10</td>
</tr>
<tr>
<td>Name Change Procedure</td>
<td>10</td>
</tr>
</tbody>
</table>
Ohio Union  
OSU Internet Access  
Postal Services  
Recreational & Physical Activities Center (RPAC)  
Security/Campus Police  
Student Advocacy Center  
Student Health Insurance Program  
Student Wellness Center  
University Laboratory Animal Resources (ULAR)  
Veteran’s Services  
Wexner Center  
Wilce Student Health Center  
Younkin Success Center

Appendices (Policies)

A. Admission Policy
B. Student Transfer Policy
C. Policy for Graduate Student Financial Support
D. Checklist and Report Forms
E. Core Curriculum
F. Curriculum Policy
G. Policy on Additional Laboratory Rotation(s)
H. Timetable for Graduate Students in Biomedical Sciences
I. Policy for Areas of Emphasis
J. Policy for Candidacy Examination
K. Procedure for a Student to Change Dissertation Advisors
L. Academic Misconduct
M. Petitions and Grievances Procedures and Guidelines
N. Policy for Graduate Faculty
O. M.D.-Ph.D. Training Program
P. IBSO Constitution
Q. Dissertation Protocol
INTRODUCTION

The Biomedical Sciences Graduate Program is the College of Medicine’s PhD program. The Council of Research and Graduate Studies is the principal legislative body of the Graduate School that initiates policies and rules governing graduate programs. The Council sets the minimum standards as published in the Graduate School Handbook and serves as a primary reference for policies, rules, and general information.

The following pages contain policies, rules and general information for the Biomedical Sciences Graduate Program, which should be reviewed and consulted in conjunction with the Graduate School Handbook.

Questions can be directed to:
Biomedical Sciences Graduate Program Staff
1170 Graves Hall
333 W. 10th Avenue
Phone: 614-292-0857
Email: bsgp@osumc.edu
Website: http://www.medicine.osu.edu/bsgp
**INTEGRATED BIOMEDICAL SCIENCE STUDENT ORGANIZATION**

The Integrated Biomedical Science Student Organization (IBSO) was founded by the inaugural class of the Program in 2001. The main goal of the IBSO is to provide comradeship to all students. The IBSO functions as the communication vehicle between its membership and the administration of the graduate program. It also provides professional and social opportunities. The IBSO strives to inform, interact with, and serve the biomedical community. The IBSO also serves the public at large in ways related to biomedical research and education. During meetings, topics discussed include future course work, recruiting events, community service projects, and student concerns. The IBSO also co-sponsors the new student orientation and The OSU Medical Center Research Day. See Appendix P for the IBSO Constitution.

**BENNETT SOCIETY**

The Bennett Society was founded in 1984 in the College of Medicine and was named in honor of the Bennett Foundation. The goals of the Bennett Society are to promote and recognize excellence in graduate research and education, as well as to enhance communication between graduate students and the faculty within the College of Medicine. The Bennett Society extends an open invitation to all graduate students in the College of Medicine to join the society to promote graduate student education and research.

**OSUMC RESEARCH DAY**

For many years there have been several different events in the College of Medicine (COM) at which students presented results of their research. While this showcased some organizations, and it gave a few students multiple opportunities to gain experience in scientific presentations and also resulted in smaller audiences. In 2002, for the first time, the COM combined a number of events, which previously had been held individually, into one OSU Medical Center Trainee Research Day. This event is held annually. In addition to students from the Biomedical Sciences Graduate Program, this event is sponsored by research trainees from the Bennett Society, Landacre Honor Society, Medical Scientist Student Organization, medical students, including those supported by the Roessler Foundation, students in interdisciplinary graduate programs who have an advisor that is a faculty member of the COM, and existing departmental graduate programs. This is also a forum for Postdoctoral Trainees, Clinical Fellows, and Residents to present their work. **Students are strongly encouraged to present a poster at this event each year after their first year of study.**
REGISTRATION AND SCHEDULING

Student First Year Advisor
In the term preceding registration, each student will be assigned a first year faculty advisor. The first meeting of this committee with the student will usually be held on Orientation Day. The major purpose of this meeting is to determine the student’s major research interest and to review plans for the laboratory rotation for the Summer session. The minutes of this meeting will be generated by the student on the appropriate report form (see Appendix D), and a copy of the signed minutes will be sent to the Biomedical Sciences Graduate Program office.

Buckeye Link (course registration)
The Biomedical Sciences Graduate Program office will help register students for the first semester. For all subsequent semesters, students will register using the Buckeye Link SIS registration system at www.buckeyelink.osu.edu. You will be notified by the Registrar’s Office, via e-mail, with the date and time your scheduling window opens. Courses for the first year are summarized in Appendix E. Please be mindful of registration deadlines, as a late fee will be assessed. If a late fee is assessed the Program will not pay for it.

Course Load
Normal full-time course load per semester for a student in the Biomedical Sciences Graduate Program is a minimum of 12 credits. A student may not enroll for more than 18 credit hours per semester or eight credit hours in summer session or four credit hours in May session, including audited courses, without advisor and Graduate School approval. Students holding the titles Graduate Fellow or Graduate Trainee, regardless of the source of the funds, must register for a minimum of 12 credit hours each semester the appointment is held except in summer session when the minimum is six. All students who successfully complete the doctoral candidacy examination are required to be enrolled in every semester (summer session is excluded) until graduation. These students must be enrolled for at least three credits per semester. This policy is effective for all students who were admitted to the Graduate School Autumn Quarter 2008 and after.

I.D. Card Processing/Replacement
Medical Center I.D. badges may be obtained and coded from the Hospital Security Department (614-293-4452), located on the first floor of Rhodes Hall. Please report lost or stolen I.D. cards immediately. Student Buck I.D. may be obtained from the University ID Card Services in the Ohio Union. First year students will receive their Medical Center and Buck I.D.s during orientation or shortly thereafter.
iTunesU is a course management system that operates on only iOS devices (iPad, iPhone, or iPod touch)

When enrolling into an iTunesU course you will be sent an enrollment code then is approved to join the course by the iTunesU Course Manager.

To enroll do one of the following:

- Click on the course link provided by the iTunesU Course Manager
- When students access the link from an iOS device (iPad, iPhone, or iPod touch), they can tap the link to request access. After request has been approved, students can access the course using an Apple ID

**OR**

- Enter the iTunesU App
- Click on the ‘+’ next to ‘Catalog’
- Click on ‘Enroll in a Course’
- Enter the enrollment code given by iTunesU Course Manager into the ‘Enter enroll code’ prompt box, click ‘Ok’
- After request has been approved, students can access the course using an Apple ID
EMPLOYMENT

Graduate Associates
During the first year of course work, students are awarded either a Graduate Research Associateship (GRA) or a Fellowship. It is the intention of the Biomedical Sciences Graduate Program that students do not require outside employment. Outside student employment must not interfere with their course of studies. See Appendix E and F for a detailed description of the curriculum requirements.

Direct Deposit
The Ohio State University uses a paperless pay system. Students will apply for direct deposit of their monthly pay to a bank of their choice. Forms to enroll for direct deposit are available at http://controller.osu.edu/pay/pay-dirdep.shtml or you can sign up for ePayroll at http://controller.osu.edu/pay/pay-paycheck.shtml#epayroll

Fee Waivers
Students who are awarded a fellowship or GRA appointment will have their fees and tuition waived. Students are responsible for other expenses, i.e., COTA, health insurance premium, etc., and should pay for their portion by the deadline established by the Registrar’s office.

Residency
Fees and tuition are based on a student’s residency status. Therefore, to obtain in-state tuition rates students are required to apply for residency status (if applicable) after 12 consecutive months of course work. Please go to the following website for the information and forms to file for residency status: http://registrar.osu.edu/Residency/index.asp

BENEFITS

Athletic Ticket Office: http://www.ohiostatebuckeyes.com
The Ohio State University’s Department of Athletics offers intercollegiate competition in 31 varsity sports. Students may purchase tickets by contacting the Athletic Ticket Office.

CABS (Campus Area Bus Service): www.tp.ohio-state.edu
You can find the routes mapped out, service schedules, and how to get access to the handivan and charter services on this web page.

Campus PARC: http://www.campusparc.com/
Campus PARC issues parking permits to faculty, staff, students and guests. Campus traffic violations are resolved through this office. Other services offered are jump-starts and unlock locked vehicles.

COTA Buses: http://www.cota.com
Bus passes are included with fees and tuition each semester. Bus schedule information can be obtained on the COTA website.
Credit Union:
All employees of OSU are eligible to join the Credit Union of Ohio, which is a non-profit full service organization. This organization provides checking and savings accounts, loans, IRA accounts, and a variety of other professional financial services to university employees. In addition, Entertainment Books, Money Orders, Travelers Checks, and discounted tickets to local amusement parks are available for sale. A Notary Public is also available.

Council of Graduate Students:  http://cgs.org.ohio-state.edu
The pamphlet will be in your orientation packets and the CGS will send you a packet of material in August.

Dental Care:  http://www.dent.ohio-state.edu
The Dental Clinic provides complete high quality dental care. All services provided by student dentists and student dental hygienists, are supervised by dentists and dental hygienists who are members of the college faculty.

Disability Services:  http://www.ods.ohio-state.edu
The Office for Disability Services exists to improve all aspects of campus life for disabled persons by providing and coordinating academic accommodations and support services to any member of The Ohio State community.

Environmental Health and Safety (EHS):  http://www.ehs.ohio-state.edu
The Office of Environmental Health and Safety formerly the Division of Environmental and Occupation Health and Safety, was established in 1979 to assist the university community to maintain a safe, healthful work environment and to comply with federal, state and local regulations. EHS is organized into eight program areas. All OSU paid personnel are expected to receive risk management training proper to their assigned work.

Financial Aid:  http://sfa.osu.edu
You can find the forms and information for scholarships, student loans, and grants.

Food Services:  http://urds.osu.edu/dining/
Seasons Cafeteria, SafeAuto Parking Garage Cafè, Caffeine Element, Express Oasis, Mirror Lake Café, The Marketplace, and Wendy’s Old Fashioned Hamburgers are a few areas that offer food services nearby. Ohio Union and Drake Union also include restaurants as well as recreational, social, educational, and cultural activities for faculty, staff, students, alumni, and guests of the University. Visit http://diningservices.osu.edu/dining/ for a complete listing of campus dining service locations where cash, Buck-ID, and major credit cards are accepted. Up-to-date menus and hours are posted here as well.

Graduate School:
The Graduate School Handbook can be accessed through the internet at the following web address www.gradsch.ohio-state.edu/. The phone number to the Graduate School is (614)292-6031.
Lantern: www.thelantern.com
The Lantern, publishes a student newspaper Monday-Friday during the school year, is one of the largest college papers in the country. It is written by the students and is available at various locations throughout the OSU campus. It includes editorials, national and local news items, information regarding activities on campus, and classified ads.

Libraries: http://library.osu.edu/
Students may borrow books with a valid University I.D. card. Individuals with a current OSU I.D. card who need material that is not available on the OSU campus may request it through the Interlibrary Loan Department. The libraries offer many services like photocopying, workshops, searches, etc.

Lost and Found:
Anyone finding lost items should contact the Hospitals Security Department (293-8500). Every attempt is made to return items to the owner(s). Anyone inquiring about a specific item may contact this office twenty-four hours a day and an officer will check to determine whether a specific item has been collected or released.

Name Change Procedure:
In the event that a name change is made contact offices with updated information:
Biomedical Sciences Graduate Program: BSGP@osumc.edu
College of Medicine Human Resources: 614-688-6696
Registrar’s Office: https://registrar.osu.edu/students/req_chng_rec.pdf

Ohio Union: www.ohiounion.com/
The Ohio Union offers a variety of recreational, dining, social, educational, and cultural activities for faculty, staff, students, alumni, and guests of the University. The one-stop area includes billiards, video games and pinball machines, a number of fast food restaurants, meeting rooms, computer labs and more.

OSU Internet Access:
Students are provided with an OSU user name and address, which can be activated from the Office of Information Technology’s website: http://www.oit.ohio-state.edu/

Postal Services:
There are collection boxes throughout campus. However, the post office on campus is located at 242 W 18th Avenue in the Journalism Building.

Recreational & Physical Activity Center (RPAC): http://recsports.osu.edu
Students may use the RPAC facilities by presenting a University I.D. card at the Recreational and Intramural Sports Office. Some of the activities offered by OSU at RPAC, ARC, and Jesse Owens Centers are: badminton, basketball, Buck-I-Robics, conditioning, golf, handball, racquetball, ice skating, intramural sports, jogging, platform tennis, swimming, tennis, volleyball, and wallyball.
Security/Campus Police: http://www.ps.ohio-state.edu/
The Hospitals Department of Security (293-8500) and University Campus Police (292-2121) are committed to crime prevention and faculty, staff, student, and visitor protection. Officers patrol the Hospitals 24 hours a day, resolving patient and visitor disturbances and recording and investigating criminal reports. Security officers are also available to escort staff at night and to assist with minor car problems. Free trained escorts (vehicle or walking) in evenings or for late nights.

Student Advocacy Center: http://studentlife.osu.edu/advocacy/
Provides answers to students’ questions, directs you to appropriate staff and departments, and gives general guidance on university policies and procedures.

Student Health Insurance Program: http://www.shi.osu.edu
All students are eligible for health insurance. The option to enroll appears when registering for classes and students must be enrolled for at least half time (6 hours undergrad, 5 hours graduate) to be eligible; however, exceptions may be granted.

Student Wellness Center: http://swc.osu.edu/
A comprehensive center for all dimensions of wellness (emotional, career, social, spiritual, financial, intellectual, aesthetic, and environmental).

University Laboratory Animal Resources (ULAR):
http://ular.osu.edu/training/required-training/
As mandated by the Animal Welfare Act, it is the responsibility of the research institution to ensure that all individuals using animals in research or teaching are qualified and appropriately trained. As such, Ohio State’s Institutional Animal Care and Use Committee (IACUC) requires that all personnel complete the following mandatory courses/registries:

Online Animal Care and Use Course
Occupational Health Registry
Occupational Health and Safety Course
OSU Financial Conflict of Interest Screening/Disclosure
Experience and Training Narrative
If your animals are to be housed in the Biomedical Research Tower (BRT), you must also complete Facility Training.

Veteran Services: http://hr.osu.edu/vet/
In order to provide quality human resource services to faculty and staff, the Office of Human Resources supports our nation's veterans with goals to provide affirmative action assistance to covered veterans; to provide employee relations support to all faculty and staff veterans; to provide enrollment certification for student veterans participating in the GI Bill program; to serve as a focal point for all campus veteran activities; and to foster a positive campus and community atmosphere.
**Wexner Center:** [http://www.wexarts.org/](http://www.wexarts.org/)
The Wexner Center for the Arts is a multidisciplinary contemporary arts center with programs in Exhibitions, Media Arts, Performing Arts, and Education. Performing arts programs are held at Mershon Auditorium and coordinated through the Wexner Center complex.

**Wilce Student Health Center:** [http://www.shc.ohio-state.edu](http://www.shc.ohio-state.edu)
Provides medical services to students. Wilce Student Health Center is located at 1875 Milliken Rd.

**Younkin Success Center:**
The Younkin Success Center is a unique collaboration between the Offices of Academic Affairs, Student Life, Department of Athletics, and the College of Education and Human Ecology that brings together learning and teaching, students and faculty, career and holistic counseling services, and undergraduate and graduate students and student athletes. Each of these services has information on their website as well as online pamphlets, questionnaires, and service options. Help, as always, is confidential. Several offices are involved in this collaboration:

  - **Career Connection:** [http://www.careerconnection.osu.edu](http://www.careerconnection.osu.edu)
    Provides students with relevant on and off campus career resources for the career decision making process. Walk-ins are first come first served and sign-up for walk-ins begin 15 minutes before the period. Resources, links, forms, and handouts are available on the Career Connection Website.

  - **Counseling & Consultation Service:** [http://www.ccs.ohio-state.edu/](http://www.ccs.ohio-state.edu/)
    Provides counseling and therapy to address personal, academic, and career concerns. There is no fee for the first 10 sessions per academic year for OSU students. If you have student health insurance and are eligible to continue in counseling, there is a $15 co-pay per session after the 10th session. Call 614.292.5766 to schedule an appointment.

  - **Walter E Dennis Learning Center:** [http://dennislearningcenter.osu.edu](http://dennislearningcenter.osu.edu)
    Provides academic learning support to students of all levels and backgrounds. All services are free to OSU students.
APPENDICES

A. Admission Policy
B. Student Transfer Policy
C. Policy for Graduate Student Financial Support
D. Checklist for Student Meetings and Report Forms
E. Core Curriculum Overview
F. Curriculum Policy
G. Policy on Additional Laboratory Rotation(s)
H. Timetable for Graduate Students in Biomedical Sciences
I. Policy for Areas-of-Research Emphasis
J. Policy for Candidacy Examination
K. Procedure for a student to change Dissertation Advisor
L. Academic Standards and Misconduct
M. Petitions and Grievances Procedures and Guidelines
N. Policy for Graduate Faculty
O. Medical Scientist Training Program
P. IBSO Constitution
Q. Dissertation Protocol
BIOMEDICAL SCIENCES GRADUATE PROGRAM
ADMISSION POLICY

Admission to the graduate program requires an undergraduate degree in the natural sciences that includes college level courses in life and physical science, including general chemistry, organic chemistry, biochemistry, general biology, physiology, genetics, physics, and college mathematics. The Graduate Record Examination (GRE) taken within the past five years is required. The Medical College Admissions Test (MCAT) will substitute for MD/PhD students. An earned cumulative grade-point average (GPA) equivalent to at least 3.0 out of 4.0 in all previous undergraduate and/or graduate college-level course work is required. If the student’s undergraduate GPA is below the minimum, the student may be eligible for admission only in demonstrated cases of exemplary research experience, motivation, and strong GRE scores.

Students are selected based on their previous academic record, a personal statement, resume/CV, three letters of recommendation, GRE scores, and a personal interview. In extenuating circumstances, and at the discretion of the Graduate Studies Committee, the interview may be conducted by telephone or by Skype. International students are required to submit Test of English as a Foreign Language (TOEFL) scores. To be competitive with the best applicants, early application by December 1 is encouraged, although applications are accepted through February 15. Interested students are encouraged to read the following website http://medicine.osu.edu/bsgp/ for more information about the Biomedical Sciences Graduate Program and application procedures. A special effort is made to recruit students from underrepresented minority groups. All domestic students are funded by the Biomedical Sciences Graduate Program or fellowships in the first year of study, and subsequently, by either their dissertation advisor or fellowships. International applicants must document that they have arranged for financial support for themselves, such as from a home government or from a Biomedical Sciences Graduate Program professor with whom they have communicated personally.

The Medical Scientist Training Program (MSTP) http://medicine.osu.edu/mstp at The Ohio State University exists to bridge the gap between clinical medicine and research. Highly qualified students may enroll in this rigorous program to pursue both the M.D. and Ph.D. degrees simultaneously. The MSTP provides state-of-the-art research and clinical medicine training for extraordinary students desiring a combined academic medicine/biomedical research career track. Candidates from this program must meet all the requirements of both the Biomedical Sciences Graduate Program and the M.D. program. MCAT scores will substitute for GRE scores for admission of these students to the Biomedical Sciences Graduate Program. Admission to the MSTP can be made through one application process. This is initiated through the American Medical College Applications Service (AMCAS): https://www.aamc.org/students/applying/amcas/
BIOMEDICAL SCIENCES GRADUATE PROGRAM
STUDENT TRANSFER POLICY

Students seeking to transfer to the Biomedical Sciences Graduate Program from another graduate program either at OSU or another institution must submit all of the application materials required for admission to the Program. The Graduate Record Examination (GRE) taken within the past five years is required. An earned cumulative grade-point average (GPA) equivalent to at least 3.0 out of 4.0 in all previous undergraduate college-level course work, or 3.3 in all graduate course work is required. All other requirements are described under Admission Policy (Appendix A).

Prior to approval of the transfer, the student may request transfer of credit for graduate courses from the current or previous program to the Biomedical Sciences Graduate Program. All students are required to complete the Biomedical Sciences Graduate Program course curriculum or its equivalent. Transferring students may appeal to substitute prior coursework for credit given, but only at the discretion of the Director for each course. The Course Director must approve such requests, and the student must submit appropriate documentation of the contents of these courses for the Course Director to review, including a detailed syllabus for each course. The student must clearly summarize the contents of the courses taken previously, and indicate how these are equivalent to specific areas of the curriculum from which exemption is being requested. The Course Director may then administer an exam to the student to further ascertain competency in the areas of study.

If the student's advisor from the previous program is a faculty member in the Biomedical Sciences Graduate Program, the student can request that the Graduate Studies Committee grant exemption from laboratory rotations. The student can also request that research data obtained while the student was in another program be applied to the Biomedical Sciences Graduate Program dissertation. This request must be accompanied by a letter from the following: (a) The advisor under whom the student was working while the data were collected and signed by the advisor; (b) All other appropriate individuals associated with that study; and (c) The current Dissertation Advisory Committee members. This letter must state that the student has permission to include this information in the dissertation. All of this material must be submitted to the Biomedical Sciences Graduate Program Graduate Studies Committee for review prior to approval.
BIOMEDICAL SCIENCES GRADUATE PROGRAM
POLICIES FOR GRADUATE STUDENT FINANCIAL SUPPORT

General policies for Graduate Research Associate (GRA) and Graduate Fellowship appointments are outlined in the Ohio State University Graduate School Handbook at [http://www.gradsch.ohio-state.edu/graduate-school-handbook1.html](http://www.gradsch.ohio-state.edu/graduate-school-handbook1.html). Policies specific to the Medical Scientist Training Program (MSTP) differ and are described at [http://www.medicine.osu.edu/mstp](http://www.medicine.osu.edu/mstp).

It is the policy of the Biomedical Sciences Graduate Program that all doctoral students actively studying in the Program should be provided with financial support in the form of a GRA or from a sponsored Fellowship. GRA support will be provided by either the Biomedical Sciences Graduate Program or the student’s research advisor. Fellowship support will be awarded by either the Graduate School or from sources external to Ohio State University. Consequently, admission to the Program is dependent upon the availability of multiyear financial support for the incoming student. In keeping with NIH guidelines for the Biomedical Sciences Graduate Program obtaining funds from an NIH-sponsored Training Program grant, the Biomedical Sciences Graduate Program will consider only those applicants who are U.S. citizens or registered aliens to be recipients of any financial support directly from Biomedical Sciences Graduate Program funds. Thus, international applicants must document that they have arranged for financial support for themselves, such as from a home government or from a Biomedical Sciences Graduate Program professor with whom they have communicated personally.

ASSOCIATESHIPS
First Year Students: Most incoming first year students will be supported by as a GRA through the Biomedical Sciences Graduate Program or University Fellowship. Initial positions are usually funded by the Biomedical Sciences Graduate Program for a period not to exceed one year, after which time the support is through the dissertation advisor. A GRA for domestic students also includes tuition and fee authorizations. GRA appointments are for 50% time, which is considered to represent 20 hours per week of research service, fulfilled in part through laboratory rotations. **Students are not permitted to hold other jobs while on GRA appointment.** Continuation of the GRA appointment by the Biomedical Sciences Graduate Program after the first year in the Program is dependent upon satisfactory performance, and will be evaluated by the Biomedical Sciences Graduate Program Graduate Studies Committee.

All Other Students: Financial support will become the responsibility of the dissertation advisor following year 1. It is expected that in most cases, financial support after year 1 will be from either the advisor’s research grant or training grants/fellowships. Hours per week in the lab are determined by the dissertation advisor. Biomedical Sciences Graduate Program students do not earn vacation and sick time leave benefits. Therefore, request for vacation time is at the discretion of the faculty advisor and the needs of the lab. Longer periods of leave should be reviewed for approval by the Biomedical Sciences Graduate Program Director in compliance with OSU Graduate School policies <http://www.gradsch.ohio-state.edu/graduate-school-handbook1.html>.

Revised 2015
FELLOWSHIPS
University fellowships are awarded to outstanding academic students and fund, in part, the pre-candidacy and post-candidacy exam years, depending upon the specific fellowship. Students must be nominated by the Biomedical Sciences Graduate Program for University fellowships and the Program will process the student’s application. Periods of training in the Program not funded by a Fellowship will be funded by either GRA appointments provided by the Biomedical Sciences Graduate Program or the faculty research advisor, as described above.

OTHER SUPPORT
Students that do not qualify for support from either the Biomedical Sciences Graduate Program or through Fellowships can be admitted into the Ph.D. program, but only following approval of documentation of financial support covering stipend, tuition, and fees. Stipends, in the form of a GRA appointment, must be at least equivalent to those provided to Biomedical Sciences Graduate Program students enrolled in the Program.

OUTSIDE EMPLOYMENT
Graduate education in the Biomedical Sciences Graduate Program is a full time endeavor. Realizing this, the Biomedical Sciences Graduate Program provides financial assistance to students to reduce the financial impact of being a graduate student full time. As a consequence, acceptance of financial assistance in any of the above forms precludes a student from being employed outside of the Biomedical Sciences Graduate Program. Exemption from this policy will be made in only exceptional circumstances. Requests for exemption must be made in writing to the Graduate Studies Committee, and have the full support of the student’s advisor and advisory committee members. Such employment should have an educational advantage for the student.

LEAVE POLICY
Vacation and Holidays. Graduate students shall receive all University holidays and no more than 14 calendar days (counting all days Monday through Sunday) of vacation per year, with no year-to-year accrual. Students will continue to receive stipends during vacations and holidays. The times between academic semesters and the summers are considered active parts of the training period and are not necessarily free times. Students taking courses are expected to attend all classes and take all exams as scheduled. For advanced graduate students, vacation time should be arranged with the dissertation advisor.

Sick Leave and Other Leave. Graduate students may continue to receive stipends for up to 14 calendar days (counting all days Monday through Sunday) of sick leave per annum, with no year-to-year accrual. Under exceptional circumstances, additional sick days may be granted following a written request and approval by the Biomedical Sciences Graduate Program Director. Sick leave may be used for the medical conditions related to pregnancy and childbirth.
Parental Leave. Graduate students may also receive stipends for 6 weeks for the birth mother for a vaginal delivery and 8 weeks for a cesarean delivery. The birth father receives 3 weeks. Parental leave must be approved by the Biomedical Sciences Graduate Program Director. Medical documentation is required.

Unpaid Leave – Individuals requiring more than 15 calendar days of sick leave or more than the parental leave allowed, must seek approval from the Biomedical Sciences Graduate Program Director for an unpaid leave of absence.

MEMORANDUM OF UNDERSTANDING (MOU)
Rotating through faculty research laboratories provides a Biomedical Sciences student with information regarding faculty and their research. This information proves helpful as Biomedical Sciences students both decide on their area of research interest and identify a faculty/dissertation advisor. The list of Biomedical Sciences Graduate Program faculty is available on the Biomedical Sciences Graduate Program Web site and a current list of funded faculty hosting rotating students will be made available each semester via e-mail. Successful completion of the first year of study will culminate in identification of a dissertation advisor. The Dissertation Advisor will sign an MOU documenting he/she has the resources and commitment to support a student making progress through completion of the program requirements. The Memorandum of Understanding [MOU (see below)] is the form that binds the agreement that the faculty/dissertation advisor will support the student with a stipend throughout the years until graduation. The student also signs the agreement to acknowledge that they are aware of the financial commitment being made by their advisor to promote their development as a scientist. The Chair of the advisor’s home department also signs the agreement to acknowledge that they will financially support the student should the advisor have difficulty with funding.
Memorandum of Understanding (MOU) Between Dissertation Advisor and Biomedical Sciences Graduate Program

This is to document the understanding that ________________ agrees to be the Dissertation Advisor for ________________ with an effective date of ________________. In addition to fulfilling the commitments outlined in the Biomedical Sciences Graduate Program Student Handbook, this agreement carries with it the obligation to provide a stipend for this student for each year of study until the student graduates from the Biomedical Sciences Graduate Program. This will be the amount that is determined annually by the College of Medicine (COM), which is currently $27,036 for FY2015. Should the source of the stipend come to an end, the Dissertation Advisor will make every effort to arrange another source for the stipend. If this cannot be done, the Dissertation Advisor will notify the Biomedical Sciences Graduate Program Directors as soon as possible (and no less than one semester before the end of funding), so that joint efforts by the Advisor, Department Chair, and Directors can be initiated to establish a funding source for the stipend. This may involve reassigning the student to a new dissertation advisor.

__________________________ Date ________________ Date
Joanna Groden, PhD
Vice Dean for Research
Professor, Department of Molecular Virology,
Immunology and Medical Genetics and Co- Director,
Biomedical Sciences Graduate Program
Or
Jeffrey Parvin, MD, PhD
Associate Dean, Graduate Studies
Louis Levy Professor for Cancer and Co-Director,
Biomedical Sciences Graduate Program

__________________________ Date
Departmental Chair
(Advisor’s home department)

__________________________ Date
I hereby understand the investment being made by my advisor to foster my development as a research scientist. I also understand my responsibilities in this program as outlined in the Student Handbook.

__________________________ Date
Student Signature
<table>
<thead>
<tr>
<th>MEETING TIME</th>
<th>MEETING DISCUSSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before first semester</td>
<td>• e-mail introduction</td>
</tr>
</tbody>
</table>
| Orientation Day or by arrangement for another time | • Career & educational Goals  
• Discuss Core curriculum & courses  
• Confirm or discuss rotation choices |
| End of Mid-Autumn | • Review academic performance  
• Discuss lab rotations and mentor possibilities |
| Mid-Spring | • Review academic performance  
• Discuss choice of Dissertation Lab and Mentor  
• Discuss dissertation research plans  
• Discuss choice of an area-of-research interest  
• Set a target date for completion of candidacy exam |

† For each meeting with the FYA, the student must submit to the Biomedical Sciences Graduate Program office a report of the meeting on the appropriate form that can be either copied from the Handbook (Appendix D) or downloaded from the Biomedical Sciences Graduate Program website. This is an important mechanism for us to track a student’s progress.
<table>
<thead>
<tr>
<th>YEAR TWO</th>
<th>FACULTY</th>
<th>MEETING GOALS</th>
</tr>
</thead>
</table>
| Beginning of Autumn | Dissertation Advisor | • Discuss dissertation project  
| | | • Choose courses for coming year |
| Mid-Autumn | Dissertation Advisor | • Review progress  
| | | • Discuss research grant proposal  
| | | • Choose courses for Spring |
| Beginning of Spring | Dissertation Advisor | • Discussions of research grant proposal  
| | | • Review progress  
| | | • Discuss courses  
| | | • Assemble and meet with Candidacy exam Committee |
| Mid-Spring | Candidacy/Dissertation Advisory Committee | • General review & choice of courses  
| | | • Set date for Candidacy exam  
| | | • Discuss written Candidacy exam |

<table>
<thead>
<tr>
<th>THIRD AND SUBSEQUENT YEARS</th>
<th>FACULTY</th>
<th>MEETING GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer/Autumn</td>
<td>Candidacy/Dissertation Exam Committee</td>
<td>• Complete Candidacy exam</td>
</tr>
<tr>
<td>Soon after Candidacy Exam</td>
<td>Dissertation Advisory Committee</td>
<td>• Review of Dissertation Research</td>
</tr>
<tr>
<td>Every 6-12 months</td>
<td>Dissertation Advisory Committee</td>
<td>• Review progress &amp; courses required</td>
</tr>
</tbody>
</table>

The student will arrange all meetings, except for the orientation meeting arranged by the Biomedical Sciences Graduate Program office and/or FYA. The student will prepare and distribute minutes of all meetings, using the appropriate form that can be either copied from the Handbook (Appendix D) or downloaded from the Biomedical Sciences Graduate Program website. After the first year, students should complete the “Meeting with Dissertation Committee Minutes” form with their dissertation advisor only if they have not chosen their committee. Students who do not complete this form by the end of the Spring semester every 12 months will receive a “U”, or Unsatisfactory, in BSGP 8999. After 4 years, the Dissertation Advisory Committee must meet every 6 months with forms due at the end of each semester.

Revised 2015
# MEETING WITH FIRST YEAR ADVISOR
## ORIENTATION DAY/FIRST MEETING

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Print______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature_________</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advisor Name</th>
<th>Print______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature_________</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of Meeting</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Career & educational Goals

- Discuss Core curriculum & courses

- Confirm or discuss rotation choices
## MEETING WITH FIRST YEAR ADVISOR
### END OF AUTUMN SEMESTER

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Print______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature_________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advisor Name</th>
<th>Print______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature_________</td>
<td></td>
</tr>
</tbody>
</table>

**Date of Meeting**

**Semester**

- Review academic performance

- Discuss lab rotations and mentor possibilities

- Any notable occurrences or concerns
# MEETING WITH FIRST YEAR ADVISOR
## MID-SPRING SEMESTER

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Print______________________</th>
<th>Signature________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisor Name</td>
<td>Print______________________</td>
<td>Signature________________________</td>
</tr>
</tbody>
</table>

**Date of Meeting**  
| Semester |

- Review academic performance
- Discuss choice of Dissertation Lab and Mentor
- Discuss choice of an area-of-research interest
- Discuss dissertation research plans
- Set a target date for completion of candidacy exam

Revised 2015
BSGP Lab Rotation Proposal
Complete this form within seven (7) days of starting a rotation
Please return to 1170 Graves Hall

1. Student name (please print) ___________________________________________________

2. Rotation advisor name (please print) ___________________________________________

3. Rotation project: Student, briefly describe your project in this laboratory.

4. Funding is available for the student to complete their dissertation research. State the funding source:

_________________________________________________________________________
_________________________________________________________________________

Lab Rotation Faculty member signature ___________________________ Date _________

5. First year advisor signature ___________________________________________________

6. Student signature ___________________________________________________________
# Lab Rotation Minutes

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Print______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature________________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advisor Name</th>
<th>Print______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature________________________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of Meeting</th>
<th>Semester</th>
</tr>
</thead>
</table>

Briefly describe rotation research and value to you (use other side, if necessary)

List techniques learned

Are you considering this lab for your dissertation research?

Have you discussed the possibility of joining the lab with your rotation advisor?

Rotation advisor comments – (if any)
Biomedical Sciences Graduate Program Candidacy Exam Committee Form
This original form must be completed and submitted to the Biomedical Sciences Program Office no later than the end of Spring Semester of the second year*

Student information

Name ________________________________ OSU I.D. number ____________________

OSU e-mail address (required) _______________________ Contact telephone number___________

The candidacy exam committee should consist of a minimum of four faculty members, with at least two faculty members who have mentored at least one student who has graduated with his/her PhD. The Committee must include:

1) The advisor, who must be a member of the Biomedical Sciences Graduate Program faculty
2) At least two other Biomedical Sciences Graduate Program faculty members
3) At least one person from outside of the advisor’s home department. This person might also be from another graduate program and not a member of the Biomedical Sciences Graduate Program faculty. However, either person must be approved by the Graduate School as having “M” or “P” faculty status). Note: “M” status faculty may sit on a candidacy exam committee, but NOT on a dissertation committee.
4) The advisor’s spouse cannot be part of this committee.

Committee members*

*Committee members must be members of the graduate faculty

Student’s advisor ________________________________ e-mail address ________________
(Category P)

Advisor’s signature

Committee member ________________________________ e-mail address ________________

Committee member ________________________________ e-mail address ________________

Committee member ________________________________ e-mail address ________________

For office use only (notes) ________________ Date Received form____________________________

*Any changes in make-up of Candidacy Examination Committee will be by written petition and must be approved by the Biomedical Sciences Program Directors.

Revised 2015
### Dissertation Committee Minutes Form

(this meeting should occur every 6-12 months)

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Print______________________ Signature__________________________</th>
<th>Year in Program _____</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisor Name</td>
<td>Print______________________ Signature__________________________</td>
<td></td>
</tr>
<tr>
<td>Dissertation Committee Members</td>
<td>Print______________________ Signature__________________________</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Print______________________ Signature__________________________</td>
<td></td>
</tr>
<tr>
<td>Date of Meeting</td>
<td>Semester</td>
<td>Date of last meeting</td>
</tr>
</tbody>
</table>

**Summary of Progress:** Paragraph highlighting progress since last meeting (use other side, if necessary)

**Area of research emphasis and courses to be taken**

**Advisor Comments:**

**Student Comments:**

Publications, Awards, Grants, etc…*Please provide the appropriate information on the next page "Student Annual Report". All pages for this information should be attached to this form.

**Is the student ready to begin writing the dissertation?**

- YES
- NO

(circle)
Appendix D

Student Annual Report

Student Name: _______________________________ Date: ______________

Faculty Advisor: ___________________ Signature: ____________________

Please provide all information for one year only. Use extra sheets, if needed.

Honors/Recognition:
Name of Honor/Award:
Presented by Group/Organization:
Date Received:

Publications:
___ Article ___ Abstract ___ Chapter/Book
Authors(s):
Title:
Publisher:
Year/Citation:

Grants/Awards: (NIH, AHA, etc.)
___Submitted ___Funded ___Approved/Unfunded
Title:
Sponsor/Agency:
Grant Period:
Amount:

Presentations:
___ Invited Talk ___ Seminar ___ Poster ___ Panelist _____________Other
Title:
Organization:
Location:
Dates:

Meetings Attended:
___ National ___ Int’l
Organization:
Title of Meeting:
Location:
Dates:
Participation: ___ Poster ___ Presented ___ Session Chair _____________Other

Other:

Revised 2015
## CORE CURRICULUM

<table>
<thead>
<tr>
<th>Biomedical Sciences Required Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BSGP 8050 Research Techniques and Resources (AU-yr. 1)</strong></td>
<td>4 semester hours</td>
</tr>
<tr>
<td><strong>BSGP 7000 Biomedical Sciences Survey (AU-yr. 1)</strong></td>
<td>6 semester hours</td>
</tr>
<tr>
<td><strong>BSGP 7040 Research Problem Solving in Biomedical Science (SP-yr. 1)</strong></td>
<td>4 semester hours</td>
</tr>
<tr>
<td>Pharmacology 7510 Professional and Ethical Issues in Biomedical Science (SP-yr. 1)</td>
<td>2 semester hours</td>
</tr>
<tr>
<td><strong>BSGP 7070 Fundamentals of Grant Writing (AU-yr. 2)</strong></td>
<td>4 semester hour</td>
</tr>
<tr>
<td><strong>BMI 5750 Course Methods in Biomedical Informatics and Data Science (SU – yr. 2)</strong></td>
<td>3 semester hours</td>
</tr>
<tr>
<td><strong>BSGP 7930 Individual Studies in Biomedical Sciences (AU-yr. 1; SP – yr. 1)</strong></td>
<td>total of 12 semester hours (4 AU-yr. 1; 8 SP-yr. 1)</td>
</tr>
<tr>
<td><strong>BSGP 7972 Research Seminar (Student Presentation) (taken the semester before or semester of graduation)</strong></td>
<td>1 semester hour</td>
</tr>
<tr>
<td><strong>BSGP 8999 Research in Biomedical Sciences</strong></td>
<td>34 credits</td>
</tr>
<tr>
<td>Elective Courses (may be in BSGP or in other departments such as MVIMG, Neuroscience, Physiology, MCB). At least 6 credit hours of the 10 required elective credit hours must be in the classroom setting and the remainder may be seminars; electives may be consistent with recommended courses in a chosen Area of Research Emphasis.</td>
<td>total of 10 semester hours</td>
</tr>
</tbody>
</table>

80 Total Credits
CORE CURRICULUM: Students entering Summer 2012 and after
FIRST YEAR CURRICULUM

<table>
<thead>
<tr>
<th>Summer</th>
<th>Autumn</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Rotation</td>
<td>Biomedical Sciences Survey</td>
<td>Research Problems</td>
</tr>
<tr>
<td>BSGP 7930</td>
<td>BSGP -7000</td>
<td>BSGP -7040</td>
</tr>
<tr>
<td>(credit hours vary)</td>
<td>(6 credit hours)</td>
<td>(4 credit hours)</td>
</tr>
<tr>
<td>Research Techniques and Resources</td>
<td>Laboratory Rotation</td>
<td>Biomedical Research Ethics</td>
</tr>
<tr>
<td>BSGP-8050</td>
<td>BSGP 7930</td>
<td>Pharmacology-7510</td>
</tr>
<tr>
<td>(4 credit hours)</td>
<td>(4 credit hours)</td>
<td>(2 credit hours)</td>
</tr>
</tbody>
</table>

It is very important that you are registered for the correct amount of credit hours each term to be considered a full time student. The following guidelines have been set forth by the graduate school:

**Post-candidacy doctoral students:** 3 credit hours per semester or summer session.

**Graduate Associates.** Graduate associates must register for at least 8 credit hours per semester, except in summer session, when the minimum is 4. Post-candidacy doctoral students must register for at least 3 credit hours each semester or summer session an appointment is held. These registration requirements can include research hours.

**Fellows and Trainees** Students holding the titles Graduate Fellow or Graduate Trainee, regardless of the source of the funds, must register for a minimum of 12 credit hours each semester the appointment is held except in summer session when the minimum is 6. Graduate Fellows or Graduate Trainees who are post-candidacy doctoral students must register for at least 3 credit hours per semester or summer session an appointment is held. These registration requirements can include research hours.

**International Students** International students are required to register for a minimum of eight credit hours per semester except in summer session, when the minimum is four, unless they hold appointments as fellows or trainees. International students who are post-candidacy must register for at least three credit hours. These registration requirements can include research hours.

For more information, see the Graduate school Handbook (Section 3.1: Course Load) here: [http://gradsch.osu.edu/3.1-course-load.html](http://gradsch.osu.edu/3.1-course-load.html)
**SECOND YEAR CURRICULUM:**  
**Students entering Summer 2012 and after**

<table>
<thead>
<tr>
<th>Summer</th>
<th>Autumn</th>
<th>Spring</th>
</tr>
</thead>
</table>
| Methods in Biomedical Informatics and Data Science  
BMI 5750 (3 credit hours) | Fundamentals of Grant Writing  
BSGP -7070  
(4 credit hours) | Dissertation Research  
BSGP 8999  
*(credit hours vary) |
| Dissertation Research  
BSGP 8999  
*(credit hours vary) | Dissertation Research  
BSGP 8999  
*(credit hours vary) | Area of Interest: Elective Course** |

*The number of dissertation credit hours is determined by each individual student’s situation. This depends on: how many credit hours are necessary for full-time status (see below), how many credit hours are allowed for each term, and how many credit hours the student is registering for in other courses. Students need to keep in mind that they will need at least 34 credit hours in BSGP 8999 and a total of 80 credits hours to graduate.*

**Elective courses**: Elective Courses (may be in BSGP or in other departments such as MVIMG, Neuroscience, Physiology, MCB). At least 6 credit hours of the 10 required elective credit hours must be in the classroom setting and the remainder may be seminars; electives may be consistent with recommended courses in a chosen Area of Research Emphasis.

**CREDIT HOUR REQUIREMENTS**

**Post-candidacy doctoral students**: 3 credit hours per semester or summer session.

**Graduate Associates**. Graduate associates must register for at least 8 credit hours per semester, except in summer session, when the minimum is 4. Post-candidacy doctoral students must register for at least 3 credit hours each semester or summer session an appointment is held. These registration requirements can include research hours.

**Fellows and Trainees** Students holding the titles Graduate Fellow or Graduate Trainee, regardless of the source of the funds, must register for a minimum of 12 credit hours each semester the appointment is held except in summer session when the minimum is 6. Graduate Fellows or Graduate Trainees who are post-candidacy doctoral students must register for at least 3 credit hours per semester or summer session an appointment is held. These registration requirements can include research hours.

**International Students** International students are required to register for a minimum of eight credit hours per semester except in summer session, when the minimum is four, unless they hold appointments as fellows or trainees. International students who are post-candidacy must register for at least three credit hours. These registration requirements can include research hours.
For more information, see the Graduate school Handbook (Section 3.1: Course Load) here: [http://gradsch.osu.edu/3.1-course-load.html](http://gradsch.osu.edu/3.1-course-load.html)

**CURRICULUM SUBSEQUENT TO SECOND YEAR:**

**Students entering Summer 2012 or after**

<table>
<thead>
<tr>
<th>Summer</th>
<th>Autumn</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissertation Research</td>
<td>Dissertation Research</td>
<td>Dissertation Research</td>
</tr>
<tr>
<td>BSGP 8999 <em>(credit hours vary)</em></td>
<td>BSGP 8999 <em>(credit hours vary)</em></td>
<td>BSGP 8999*(credit hours vary)*</td>
</tr>
<tr>
<td>Area of Interest or Elective Course**</td>
<td>Area of Interest or Elective Course**</td>
<td>Area of Interest or Elective Course**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>***BSGP Senior Seminar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BSGP 7972 (1 credit hour)</td>
</tr>
</tbody>
</table>

*The number of dissertation credit hours is determined by each individual student's situation. This depends on: how many credit hours are necessary for full-time status (see below), how many credit hours are allowed for each term, and how many credit hours the student is registering for in other courses. **Students need to keep in mind that they will need at least 34 credit hours in BSGP 8999 and a total of 80 credits hours to graduate.***

**Elective courses:** Elective Courses (may be in BSGP or in other departments such as MVIMG, Neuroscience, Physiology, MCB). At least 6 credit hours of the 10 required elective credit hours must be in the classroom setting and the remainder may be seminars; electives may be consistent with recommended courses in a chosen Area of Research Emphasis.

***BSGP 7972***: Senior Student Seminar: 1 credit hour. Due to limited space, please contact the BSGP office in advance to be placed on a priority list for this required course.

**CREDIT HOUR REQUIREMENTS**

Post-candidacy doctoral students: 3 credit hours per semester or summer session.

Graduate Associates. Graduate associates must register for at least 8 credit hours per semester, except in summer session, when the minimum is 4. Post-candidacy doctoral students must register for at least 3 credit hours each semester or summer session an appointment is held. These registration requirements can include research hours.

Fellows and Trainees Students holding the titles Graduate Fellow or Graduate Trainee, regardless of the source of the funds, must register for a minimum of 12 credit hours each semester the appointment is held except in summer session when the minimum is 6. Graduate Fellows or Graduate Trainees who are post-candidacy doctoral students must register for at least 3 credit hours per semester or summer session an appointment is held. These registration requirements can include research hours.

International Students International students are required to register for a minimum of eight credit hours per semester except in summer session, when the minimum is four, unless they hold appointments as fellows or...
trainees. International students who are post-candidacy must register for at least three credit hours. These registration requirements can include research hours.

For more information, see the Graduate school Handbook (Section 3.1: Course Load) here: http://gradsch.osu.edu/3.1-course-load.html
BIOMEDICAL SCIENCES GRADUATE PROGRAM
CURRICULUM POLICY

Curriculum Prior to Candidacy Examination (Years 1 and 2)
Students will take the entire curriculum of the Biomedical Sciences Graduate Program, leading to the degree of Doctor of Philosophy. A student may modify it only by making a formal petition to the Graduate Studies Committee. In accordance with the requirements of the Graduate School, students must register for a minimum of 80 graduate credit hours to graduate with the Ph.D. degree. Graduate Research Associates holding 50 percent or greater appointments must register for at least eight credit hours per semester, except in summer session, when the minimum is four. Students holding the titles Graduate Fellow or Graduate Trainee, regardless of the source of the funds, must register for a minimum of 12 credit hours each semester the appointment is held except in summer session when the minimum is six. The total number of required courses, including laboratory rotations, in the Biomedical Sciences Graduate Program is to total at least 70 credit hours. The distribution of these hours is described below.

Students will begin their first year in Autumn semester. It is required that prior to choosing a dissertation advisor at the end of the first year, students will be required to complete at least two laboratory rotations (BSGP-7930), but not to exceed three by the end of spring semester. Students should spend a minimum of 3 to 4 hours in the laboratory for each credit hour of BSGP-7930.

Year 1: Summer = 5 credit hours (unless not doing a rotation)
   Autumn: 4 Credit hours
   Spring = 8 credit hours
By the end of the spring semester, students are expected to have a dissertation advisor and subsequently register for laboratory research as BSGP-8999.

During the first two years of the program the students should have taken all of the didactic courses listed in the table below.

Curriculum After Candidacy Examinations
The candidacy examination will be taken by the end of Autumn Semester of the third year for Ph.D. students, and by the beginning of year 4 for MSTP students. Subsequent to the candidacy exam, students must continue to enroll for a total of 3 credit hours each semester, which will include lab research (BSGP 8999) and any other advanced coursework required. If more than 3 credit hours are required, special permission must be obtained from the Graduate Program Director. There is no programmatic restriction on the number of advanced courses and seminars taken, but they should be discussed and approved by the student’s Advisor and Dissertation Advisory Committee and indicated in the meeting minutes. Also, if credit hours will exceed the 3-credit limit post-candidacy, permission must be obtained from the Graduate Program Director. To receive Graduate Specialization Transcript Designations, students must complete the courses outlined in the descriptions of the specific areas of research interest (see both

Revised 2016
Appendix I for basic description and website for most current course/seminar requirements. Subsequent to the candidacy examination, students will continue to register for BSGP-8999 for all dissertation research with a specific graduate faculty member. **Students, as of the incoming class of 2008, are required to have at least one first-author original research publication in a peer-reviewed journal that is either published or In Press at the time of the defense in order to be awarded the Ph.D.**

**Biomedical Sciences Required Courses**

- BSGP 8050 Research Techniques and Resources (AU-yr. 1) 4 semester hours
- BSGP 7000 Biomedical Sciences Survey (AU-yr. 1) 6 semester hours
- BSGP7040 Research Problem Solving in Biomedical Science (SP- yr. 1) 4 semester hours
- Pharmacology 7510 Professional and Ethical Issues in Biomedical Science (SP- yr. 1) 2 semester hours
- BSGP 7070 Fundamentals of Grant Writing (AU-yr. 2) 4 semester hour
- BMI 5705 Course Methods in Biomedical Informatics and Data Science (SU – yr. 2) 3 semester hours
- BSGP 7930 Individual Studies in Biomedical Sciences (AU- yr. 1; SP – yr. 1) total of 12 semester hours (4 AU-yr. 1; 8 SP-yr.1)
- BSGP 7972 Research Seminar (Student Presentation) (taken the semester before or semester of graduation) 1 semester hour

**Elective Courses** (may be in BSGP or in other departments such as MVIMG, Neuroscience, Physiology, MCB). At least 6 credit hours of the 10 required elective credit hours must be in the classroom setting and the remainder may be seminars; electives may be consistent with recommended courses in a chosen Area of Research Emphasis.

80 Total Credits
BIOMEDICAL SCIENCES GRADUATE PROGRAM
POLICY ON ADDITIONAL LABORATORY ROTATIONS

A student in the first year of study in the Biomedical Sciences Graduate Program will be financially supported as outlined in the “Policy for Graduate Student Financial Support.” A student whose stipend and tuition is paid by the Biomedical Sciences Graduate Program will be required to complete at least two laboratory rotations with two different Biomedical Sciences Graduate Program faculty members, but not to exceed four. The major goal of this is to identify a Biomedical Sciences Graduate Program faculty member who will serve as the student’s dissertation advisor, and as such will be responsible for the student’s stipend and tuition subsequent to the first year of study. Completing the Memorandum of Understanding (Appendix C) secures this arrangement. It is expected that such an agreement with a dissertation advisor will be reached after 3-4 laboratory rotations, although an occasional student may require an additional rotation after the first year to identify an advisor. Financial support of a student by the Biomedical Sciences Graduate Program to conduct an additional rotation after one year will only be considered under extenuating circumstances and is not guaranteed. To obtain such support a student must petition the Graduate Studies Committee for approval. This petition should include:

- A detailed explanation of each laboratory rotation already completed;
- Reports that were submitted to the Biomedical Sciences Graduate Program office at the end of each of the previous rotations;
- The reasons why a dissertation advisor was not identified consequent to these rotation experiences;
- The name of the graduate faculty member with whom the student will be rotating during the additional requested rotation, and an outline of what will be accomplished during this rotation;
- A letter of support from the faculty member in whose laboratory the rotation will be conducted stating:
  1. That they are in a position to support the student as their dissertation advisor, and
  2. Is willing to do so depending upon the performance of the student in the planned laboratory rotation;
- A letter from the First Year Advisor documenting the above and providing additional information as appropriate of this request;

The decision of the Graduate Studies Committee will depend on the justification of the request and the availability of funds for this purpose. If the request is denied, the student will be responsible for his or her own tuition and no stipend will be provided by the Biomedical Sciences Graduate Program during the additional rotation(s).
TIMETABLE FOR GRADUATE STUDENTS IN THE
BIOMEDICAL SCIENCES GRADUATE PROGRAM

The following is a suggested timetable for Students entering the Biomedical Sciences Graduate Program directly from an undergraduate program. Students should use this as a guideline for progress, but should attempt to complete the candidacy examination by the end of the Autumn Semester of the third year. The student should note that scheduling of the following meetings, as well as the preparation and submission of reports for these meetings, is the student’s responsibility. All meeting forms are included in Appendix D.

Year One
As soon as an applicant is admitted, the Graduate Studies Committee will appoint a First Year Advisor. A meeting of the student with the First Year Advisor should take place on the afternoon of Orientation Day or at another convenient time, and should be arranged ahead of time via email communication. At this meeting, the student and First Year Advisor will discuss the student’s career and educational goals, the core curriculum, and other courses that may be needed by the student. If the student starts in the summer, they will discuss the first laboratory rotation that should already have been arranged. If the student starts at the Autumn semester, then the first rotation will begin during the latter half of the Autumn semester. During the first half, when the student takes the Laboratory Methods class, they should arrange the rotation. During the academic year, rotations are expected to be 7 weeks in duration (one half semester). All rotations chosen throughout the first year should be conducted in laboratories of potential dissertation advisors. The rotations will count for BSGP-7930 course credit. At the start of each rotation, the student and rotation advisor must complete a rotation plan form (Appendix D). At the end of each rotation, and to receive course credit, the student must submit a rotation report on the appropriate form (Appendix D-"Student Lab Rotation Minutes") to 1) the rotation supervisor(s); 2) the First Year Advisor; and 3) a copy to the Biomedical Sciences Graduate Program office for inclusion in the student’s file.

According to the schedule outlined in Appendix D, the student will meet with the First Year Advisor for a general review of progress, a discussion about rotation experience and remaining rotations and courses to be taken during the next semester, and a potential choice of an Area of Research Emphasis for the second and subsequent years. If the First Year Advisor feels that there is sufficient reason to discuss any aspect of the student's progress, he/she may call a meeting of the Graduate Studies Committee with or without the student being present. The results of this meeting will be submitted to the Biomedical Sciences Graduate Program Director for inclusion in the student’s file.

Toward mid-Spring semester the student must meet again with the First Year Advisor. By this time the student should have chosen a Dissertation Advisor with whom the student will begin working full time during the second summer. Decisions should also be made about the choice of an Area of Research Emphasis (see Policy for Areas of
Research Emphasis, Appendix I, and the Biomedical Sciences Graduate Program website for details on required advanced courses). Other topics to be discussed will include academic performance, financial support, courses for the coming year, MOU, and a target date for the Candidacy Examination.

**Year Two**

During Summer semester, students will work in the laboratory of their Dissertation Advisor. The Dissertation Advisor and student must have signed the Memorandum of Understanding [(MOU) - see Appendix C]. The student will register in BSGP-8999 for credit for work in the laboratory, and may take any available courses that will be of benefit, but only after consultation with advisor. By the end of Summer semester, the student should have a good idea for a dissertation research project, and should decide on members of the Candidacy Exam Committee (The composition of the Candidacy Exam Committee will often be the same as the Dissertation Committee, but not necessarily).

This committee should consist of a minimum of four faculty members that include:

1) The advisor, who must be a member of the Biomedical Sciences Graduate Program faculty

2) At least two other Biomedical Sciences Graduate Program graduate faculty members

3) At least one person from outside of the advisor’s home department (this person does not need to be a Biomedical Sciences Graduate Program faculty member). This person might also be from another graduate program and not a member of the Biomedical Sciences Graduate Program faculty. However, either person must be approved by the Graduate School as having “M” or “P” faculty status). Note: “M” status faculty may sit on a candidacy exam committee, but NOT on a dissertation committee.

4) The advisor’s spouse cannot be part of this committee.

To reiterate, all committee members of the committee should have “P” faculty status with the Graduate School, although one member may have “M” faculty status for the candidacy exam only. For “M” faculty status to be a member of the dissertation committee, the student and mentor must request approval by the Graduate Studies Committee. Any exceptions outside of “P” and “M” faculty, e.g., professors from outside of OSU, the student and mentor must request approval by the Graduate Studies Committee, who will then request the Graduate School for an official exemption.

At the beginning of Autumn semester, the student will meet with the Dissertation Advisor to discuss the dissertation project that will form the basis of the written document for the Candidacy Examination (see Policy for Candidacy Examination, Appendix J). The student must submit a report of this meeting on the appropriate form (Appendix D-"Student Meeting Minutes") to 1) the Dissertation Advisor; and 2) the Biomedical Sciences Graduate Program office for inclusion in the student’s file.

During Mid-Autumn semester, the student should meet with the Dissertation Advisor for a general review of progress and a discussion of courses to take in Spring semester. A target date for the Candidacy Examination should be set at this time. A written report of
this meeting with the Advisor will be submitted on the appropriate form (Appendix D-
"Student Meeting Minutes") to 1) the First Year Advisor; and 2) a copy to the Biomedical Sciences Graduate Program office for inclusion in the student’s file.

During Spring semester, the student will write a research grant proposal based on the proposed dissertation research (see Policy for Candidacy Examination, Appendix J). At the beginning of Spring Semester, the student will meet with the Dissertation Advisor for a general review and discussion of courses to take in Summer semester. A written report of this meeting will be submitted on the appropriate form (Appendix D-"Student Meeting Minutes") to 1) the First Year Advisor; and 2) a copy to the Biomedical Sciences Graduate Program office for inclusion in the student’s file.

During Mid-Spring Semester, a target date for the Candidacy Examination should be set, and the research proposal from the grant writing class, which will form the basis for the written part of the candidacy examination, should be discussed in a meeting with the Candidacy Exam Committee. A written report of this meeting will be submitted on the appropriate form (Appendix D-"Student Meeting Minutes") to 1) the First Year Advisor; and 2) a copy to the Biomedical Sciences Graduate Program office for inclusion in the student’s file. The Biomedical Sciences Graduate Program Core Curriculum should be completed by the end of the Summer semester.

Third and Subsequent Years

The Candidacy Examination must be completed by the end of the first Semester of the third year, i.e., end of Autumn semester. Any exceptions to this deadline must be approved by the Program Directors. A written request must be submitted to the Program Directors in which the student and advisor discuss the reasons for a delay. A written report of the Candidacy Exam meeting will be submitted on the appropriate form (Appendix D-"Student Meeting Minutes") to 1) the Dissertation Advisor; and 2) a copy to the Biomedical Sciences Graduate Program office for inclusion in the student’s file.

Subsequently, the Dissertation Committee will be established and they will meet with the student. The Dissertation Committee meets with the student once in year 4 and twice each year thereafter. This committee must meet the same requirements for composition as the candidacy exam committee described above, with the exception that only faculty with “P” faculty status will be acceptable). At these meetings, there will be a review of the general progress in the student’s classes and research. This committee should comment on the validity and feasibility of the proposed project. They will also suggest courses, seminars, etc., that the student should either take for credit or audit. A written report of these meetings will be submitted on the appropriate form (Appendix D-"Student Meeting Minutes") to the Biomedical Sciences Graduate Program Office.

**Students, as of the incoming class of 2008, are required to have at least one first-author original research publication in a peer-reviewed journal that is either published or In Press at the time of the defense in order to be awarded the Ph.D.**
See Appendix Q for a flow chart of what needs to be done as one begins to plan for the dissertation exam. The entire Ph.D. program should be completed in 4 to 5 years; the program must be completed within 5 years of the Candidacy Examination. The Biomedical Sciences Graduate Program office will track these events and notify the student, Advisor, and Dissertation Committee if the above is not conducted in a timely fashion.
BIOMEDICAL SCIENCES GRADUATE PROGRAM
POLICY FOR AREAS-OF-RESEARCH EMPHASIS

General
Successful completion of the Biomedical Sciences Graduate Program leads to a Ph.D. in Biomedical Science. At the end of the first year, students choose one of several areas-of-research emphasis that highlights at least one area in which the student will take advanced courses and seminars. Completion of the requirement will result in a Graduate Specialization Transcript Designation at the completion of the Ph.D.

The following are Graduate Specialization Transcript Designations that are currently approved by the Biomedical Sciences Graduate Program Graduate Studies Committee:

- Biology of Neurological Disorders
- Cancer Biology
- Cellular and Molecular Physiology (formerly designated Cardiac and Muscle Physiology and Cell, Organ Systems and Integrative Biology).
- Computational Biology and Bioinformatics
- Experimental Therapeutics
- Genetics
- Immunology
- Microbial Pathogenesis
- Molecular Basis of Disease
- Translational Research

Graduate Specialization Transcript Designation
A student may request Graduate Specialization Transcript Designation in one or more of these areas. To obtain this designation, the student should discuss the plan with the First Year Advisor. Then the student should contact the Faculty Liaison for a particular area-of-research emphasis (see Biomedical Sciences Graduate Program website for contact name) during the first year of graduate study to determine the course and seminar requirements for the area of emphasis, and to be certain that the nature of the dissertation research that is planned is appropriate for this designation. It is the responsibility of the student to be certain that all requirements for this area of emphasis are met. The student will notify the area-of-emphasis Faculty Liaison that she/he wishes to receive a Graduate Specialization Transcript Designation in the area-of-research emphasis. The Faculty Liaison will review the transcript and dissertation, and if these meet the requirements for Graduate Specialization Transcript Designation in that area-of-research emphasis, the liaison will notify the graduate program office so the office can initiate the online specialization form.

For a new area-of-research emphasis to be added, a faculty member who is willing to serve as the Faculty Liaison for this area will submit such a request to the Biomedical Sciences Graduate Program Graduate Studies Committee. This request must address the following issues.
1. The theme of an area-of-research emphasis should be potentially fundable as a Training Program Grant from a source outside of the College of Medicine.

2. The Theme should fit into the Biomedical Sciences Graduate Program and College of Medicine mission of Biomedical Research, which is to improve people’s lives.

2. The Graduate Studies Committee will grant official status to an area-of-research emphasis after it reviews materials presented to it by representatives of the proposed area. This proposal should address the following:

   a) **Rationale** for identifying this area-of-research emphasis according to items 1 and 2 above.

   b) **Relation and contributions of the Area to the goals of the Biomedical Sciences Graduate Program.** This should also address all of the issues stated above in this policy.

   c) **Graduate Specialization Transcript Designation** This should include statements about the following:
      - Application process
      - Dissertation requirements
      - Curricular requirements, i.e., required courses and seminars
      - List of appropriate elective courses

**Track in Translational Bioinformatics**

The Biomedical Sciences Graduate Program was designed with the fundamental educational goals of providing students with two elements for success as researchers:

1) Intensive, broad-based education related to the mechanisms of human disease; and

2) In depth research with investigators at the forefront of science.

The experience of the Biomedical Sciences Graduate Program to date has been that the integrated biological emphasis has served our students well and contributed to a highly competitive standing among biomedical research graduate programs. Biomedical research today is becoming a team effort and datasets are becoming very large. For our students to be successful they need a background from biological and computational sciences.

Translational bioinformatics is an emerging field that uses computation to join molecular, genetic, and cellular concepts to drugs, diseases, symptoms and patients\(^1\). Students in translational bioinformatics will be ideally suited to the Biomedical Sciences Graduate Program because they are focused on direct application of bioinformatics to the mechanisms of human disease.
Proposed Course Load Requirements for 1st and 2nd Year Students in the Translational Bioinformatics Track:

The translational bioinformatics students will be expected to maintain the same timetable as other students with the following modifications:

First Year Course Load
1) In the first year, translational bioinformatics students will take the courses that are deemed necessary by the appropriate advisory committee in this area of specialty.

Second Year Course Load
1) Students in translational bioinformatics will also take the course in biostatistics that has been designed for the needs of biological scientists.
2) A senior student will be assigned to provide study guidance for students who may need it for success.

Third Year Course Load
1) Translational bioinformatics will complete their candidacy exam by the end of summer.

1) [http://rbaltman.wordpress.com/](http://rbaltman.wordpress.com/)
2) Appendix H of Biomedical Sciences Graduate Program Student Handbook
BIOMEDICAL SCIENCES GRADUATE PROGRAM
POLICY FOR CANDIDACY EXAMINATION

For a student to take the Candidacy Examination, they must first meet the requirements of The Ohio State University Graduate School. This includes being in good standing, i.e., with a minimum grade point average of 3.0 in the Graduate School and registered for at least three graduate credit hours during the semester of the Examination. The written and oral parts of the candidacy exam will be evaluated separately.

Written Portion
The written portion of the Candidacy Examination will be taken by the end of Autumn Semester of the third year for Ph.D. students, and by the beginning of year 4 for MSTP students. Any deviation from this timetable must be appealed in writing and approved by the Program Directors prior to the beginning of the expected semester. The examination will culminate in the completion of a full-length research proposal that reflects the intended area of the student's dissertation research. The proposal will be written in the format of an NIH small grant, as taught, written, and reviewed in the grant writing class in the second year. The student must write the proposal independently, although the student may consult with their Dissertation Advisor, who should approve the dissertation proposal for suitability of distribution to the Candidacy Exam Committee. The candidacy exam committee should consist of a minimum of four faculty members, with at least two faculty members who have mentored at least one student who has graduated with his/her PhD. The Committee must be selected and convene in the spring semester of the second year and must include:

1) The advisor, who must be a member of the Biomedical Sciences Graduate Program faculty
2) At least two other Biomedical Sciences Graduate Program faculty members
3) At least one person from outside of the advisor's home department. This person might also be from another graduate program and not a member of the Biomedical Sciences Graduate Program faculty. However, either person must be approved by the Graduate School as having "M" or "P" faculty status). Note: "M" status faculty may sit on a candidacy exam committee, but NOT on a dissertation committee.
4) The advisor's spouse cannot be part of this committee.

To reiterate, all committee members of the committee should have "P" faculty status with the Graduate School, although one member may have "M" faculty status for the candidacy exam only. For “M” faculty status to be a member of the dissertation committee, the student and mentor must request approval by the Graduate Studies Committee. Any exceptions outside of “P” and “M” faculty, e.g., professors from outside of OSU, the student and mentor must request approval by the Graduate Studies Committee, who will then request the Graduate School for an official exemption. Please see Candidacy Exam Committee form in Appendix D.

It is the student's responsibility to make all arrangements for establishing a date for the oral part of the examination that is agreeable to all members of the examination committee. This date needs to be established early so that there will be enough time to

Revised 2015
complete the candidacy exam by the time stipulated by the Graduate School (end of Autumn Semester of third year). At least 4 weeks before the established oral exam date, the student must deliver the written document to the Candidacy Exam Committee members for their review. After 2 weeks of review time, the Examination Committee will determine the result of the written portion of the examination to be either satisfactory or unsatisfactory, and this result will be communicated to the mentor. It is the responsibility of the student to remind the committee that they will need to make this evaluation within 2 weeks and to communicate it to the mentor. It is also the responsibility of the student to remind the mentor to obtain the result from the committee members.

If the written exam is found to be satisfactory for moving forward, it is the responsibility of the student to ask each committee member to electronically sign the Graduate School form that confirms that the written document is satisfactory.

If the proposal is found to be unsatisfactory, the student will be given an opportunity to do a re-write according to suggestions made by the committee. The corrected written document must be re-submitted to the committee in a period of time that does not exceed one academic semester.

**Oral Portion**
This part of the Candidacy Examination will be based on the written document, but will include any materials considered to be relevant by the Candidacy Exam Committee. At least half of the oral examination will be based on general science questions that are designed to elicit critical thinking. The oral examination will be held in compliance with the rules set by The Ohio State University Graduate School. While the advisor participates in the evaluation of the written portion of the exam, during the oral exam the advisor should be present and in the ideal case participates minimally. The advisor must not answer for the student, may ask some questions if necessary, and is available to help other committee members as needed. The advisor may not serve as chair of the Committee. The format for the oral exam will be a chalk board presentation; computer-based presentations will be limited.

Successful completion of the Candidacy Examination indicates that the student passed both portions, written and oral. Students who fail to pass the exam will be allowed to re-take the examination one more time, and this may or may not require revisions to the submitted proposal. The re-take of the exam should take place in a period of time that does not exceed one academic semester. Students who do not pass the candidacy examination the second time will be unable to continue.

Revised 2015
BIOMEDICAL SCIENCES GRADUATE PROGRAM
Procedure for a Student to Change Dissertation Advisor

Should a situation arise in which either the student or advisor believes that the student should be under the direction of a different dissertation advisor, the following steps should be taken:

1) Prior to seeking another advisor, the student and advisor should hold discussions to determine if the problems or situation can be satisfactorily resolved in another manner.

2) If a resolution between the student and advisor cannot be obtained, such that the student will remain with the advisor, a formal meeting of the student’s dissertation advisory committee should be arranged by the student at which both the student and advisor will be present. Prior to this meeting both the advisor and student will submit to the committee members a summary of the situation from both points of view. The issues and any reasonable alternatives should be thoroughly discussed at the meeting. Minutes will be kept by a faculty committee member who is other than the advisor or new advisor. The minutes will be distributed to the committee members for approval of content, and the approved minutes will be sent to the Biomedical Sciences Graduate Program Directors. A copy of the minutes will be placed in the student’s permanent file. If a resolution to change labs is agreed upon, then the Graduate School will be notified for further recommendations.

3) If a resolution that is agreeable to both the student and advisor cannot be reached at the meeting of the Dissertation Advisory Committee, so that the student can remain with the advisor, there should be a meeting of the student, advisor, and the Biomedical Sciences Graduate Program Director. The issues should be discussed and a resolution of the problems obtained, if possible. The Biomedical Sciences Graduate Program Manager will be present and write minutes of this meeting, which will be sent to the student, the advisor, the advisory committee, and the Biomedical Sciences Graduate Program Director. A copy of the minutes will be placed in the student’s permanent file.

4) If a resolution that is agreeable to the student, advisor cannot be reached at the meeting with the Biomedical Sciences Graduate Program Director, so that the student can remain with the advisor, the issues will then be discussed by the Biomedical Sciences Graduate Program Graduate Studies Committee. Prior to this meeting, all written materials related to this issue will be provided to the committee members, and both the student and advisor will be given the opportunity to supplement these materials. The issues will be discussed at a meeting of the Graduate Studies Committee. The student and advisor may be asked to be present at this meeting. After discussing these issues, the committee will make a recommendation concerning whether or not the student can transfer to a different dissertation advisor.
5) If, after following the above procedure, the student wishes to seek a different dissertation advisor, the Biomedical Sciences Graduate Program may provide a stipend and costs of tuition and fees for up to one semester, depending upon availability of funds. After that semester, the student should have identified an advisor who is willing to pay the stipend from a grant that collects full indirect costs. The Biomedical Sciences Graduate Program will then arrange for payment of tuition and fees. If the change occurs during a semester, the credit hours for independent research should be divided between the two advisors, according to the amount of time the student spends under the direction of each advisor. The student and new advisor may wish to form a different dissertation advisory committee.
BIOMEDICAL SCIENCES GRADUATE PROGRAM
ACADEMIC STANDARDS AND ACADEMIC MISCONDUCT

The Biomedical Sciences Graduate Program requires all students to adhere to the rules and intent of The Ohio State University Graduate School and the University Code of Student Conduct.

Biomedical Sciences Graduate Program Academic Standards
The Graduate School requires all students enrolled in graduate programs at The Ohio State University to maintain a grade point average of 3.0 or above to be in good standing. Students who fail to do so are placed on academic probation until they raise their GPA to 3.0 or above within a maximum of 2 academic semesters or sessions. As per university rules, students whose GPA remains below 3.0 following two semesters of academic probation will be denied future registration in the Biomedical Sciences Graduate Program.

Academic Misconduct
All students are expected to follow the OSU Code of Student Conduct. The code applies to on-campus and off-campus conduct of students. All students are informed that copying or paraphrasing paragraphs, sentences, or phrases directly from textbooks, journal publications, or any form of written or electronic document, and then submitting them as answers for any examination or fulfillment of other academic assignment is an act of plagiarism. Plagiarism includes the use of someone else’s words or ideas as your own, without proper documentation. In no instance will any form of academic misconduct be tolerated. Students found violating the codes of academic honesty will receive a failing grade and be reported to the Office of Academic Affairs according to University policy. Sanction may include expulsion from the program.
BIOMEDICAL SCIENCES GRADUATE PROGRAM
PETITIONS AND GRIEVANCE PROCEDURES AND GUIDELINES

Petitions
A student may petition for relaxation of, or modification to, any rules in the Biomedical Sciences Graduate Program handbook by submitting a written petition to the Biomedical Sciences Graduate Program Graduate Studies Committee (GSC). Such a petition by a student should be accompanied by a letter of support from the first year advisor or dissertation advisor.

Grievance Procedures
Occasionally, conflicts may arise either between graduate students or between students and faculty and/or staff members. Sincere attempts should be made to resolve conflicts among the involved parties before any grievance policy is activated. Conflicts between a student and the dissertation advisor that cause either party to seek a change in the student’s advisor must follow the “Procedure for a Student to Change Dissertation Advisor (Appendix K).”

If a grievance remains after exhausting the informal process between the involved parties, the person having the unresolved complaint may file a written grievance with the Biomedical Sciences Graduate Program GSC. The following protocol will be used:
1) The Biomedical Sciences Graduate Program GSC will act as the Graduate Student Grievance Committee (GSGC).
2) One of the Biomedical Sciences Graduate Program Directors will chair the GSGC, unless personally involved, in which case the Chair will be excluded from all deliberations on the matter and the GSC will select a Chair from among the remaining Biomedical Sciences Graduate Program GSC members.
3) Members of the Biomedical Sciences Graduate Program GSC directly involved in the case will also be disqualified from sitting on the panel for that specific case. In such circumstances, the Chair will designate an alternate, when possible, from the same area of expertise as the disqualified member.
4) The Chair of the Biomedical Sciences Graduate Program GSGC will set a hearing date no later than two weeks after the grievance statement is received.
5) At least 72 working hours prior to the hearing, the chair of the GSGC will provide to all parties a written statement of the specific grievance, a notification of the time and place of the hearing, and copies of documents relevant to the grievance hearing.
6) Each party will appear in person to present his or her case.
7) The Chair will preside over the hearing and determine all procedural matters. This is an administrative proceeding and, therefore, the formal rules of legal procedures do not apply.
8) All parties will be entitled to an expeditious hearing.
9) The final decision of the GSGC will be reported in writing to the parties involved not later than two weeks after the hearing. The report on this decision will also include a statement concerning the validity of the complaint.
10) Throughout this process the GSGC will attempt to mediate a resolution.
11) Cases not resolved at this level will be referred to the Graduate School, and formal grievance procedures shall be activated as defined by the Graduate Associate Grievance Procedures Guidelines (available from the Graduate School).
BIOMEDICAL SCIENCES GRADUATE PROGRAM
POLICIES FOR GRADUATE FACULTY AND GRADUATE TEACHING FACULTY

Graduate Faculty Status in the Biomedical Sciences Graduate Program will be reserved for faculty with at least a 25% appointment, as regular, tenure track faculty, in the College of Medicine (COM). In addition, as the mission of the Biomedical Sciences Graduate Program is to train researchers, applying faculty should have sufficient funding to support a graduate student stipend and research. Initial appointments will be for four years and will be reviewed every four years. Faculty members who have not made a substantive contribution may have their Graduate Faculty status with the Biomedical Sciences Graduate Program revoked. It is fully expected that all Graduate Faculty will contribute in a substantive way to the program. This will include the following:

1. Teaching in the core Biomedical Sciences Graduate Program curriculum or any other Biomedical Sciences Graduate Program course.
2. Mentoring Biomedical Sciences Graduate Program seminars and/or journal clubs/research-in-progress.
3. Service to the Biomedical Sciences Graduate Program, including serving on a student committee, serving as a mentor for a student, a core course module leader, interviewing new recruits, and/or attending recruitment dinners.

The policy for admission to the Biomedical Sciences Graduate Program faculty, as well as access to graduate students for rotations and mentoring, to include the following 2 criteria:

Step 1: The applicant must be tenure-track professors (assistant, associate, or professor) with independent extramural funding.

Step 2: The requirements for eligibility to compete for mentorship of one of the Biomedical Sciences students will be as follows:

a) Faculty member must have at least 3 years of independent funding available for student expenses.

b) For those new faculty without any previous mentoring experience, attendance in a mentoring class is required and documented. Previous oversight of a graduate student while training as a postdoc will not qualify as mentoring experience.

c) A faculty member who did not have space granted as part of their hire contract, but who use the space of another more senior PI, must have the Department Chair verify in a signed letter that adequate research space will be made available to the faculty member should the PI leave. Also, if the funding is part of a P01 directed by the senior PI, then the letter will state that if the PI leaves, the Chair will help with expenses.

The Program Director will distribute faculty status applications to the Graduate Studies Committee (GSC). The GSC will approve the request, deny the request, or ask for further documentation. This could include a personal interview with individual members of the GSC or the entire GSC. After receiving the additional information, the GSC will
again consider the application and make a decision to approve or deny the request. Approval requires a majority of all active members of the GSC or their alternates. A decision to admit a new member is equivalent to a majority vote by the Biomedical Sciences Graduate Program faculty to appoint the candidate to the faculty. The Directors of the Biomedical Sciences Graduate Program will then complete the required forms and send them to the Graduate School and inform the applicant of the decision.

**Category P and Category M Membership**
The Graduate School Handbook describes the criteria for appointment and responsibilities of graduate faculty with Category M or P status (see below). BRIEFLY, Category P faculty advise PhD and MS students; category M faculty advise MS students only. Category M faculty may serve on dissertation exam and advisory committees of PhD students only upon the approval of the Graduate Studies Committee. Please see guidelines below, as described in Graduate School Handbook.

**FROM GRADUATE SCHOOL HANDBOOK**
**Qualifications and Special Rights and Responsibilities**

XV.4 Appointment can be directly to either Category P or M. The two categories do not imply a sequence.

**Minimum Category P Qualifications.** The faculty member
1. holds appointment as a regular, tenure-track, faculty member
2. holds an earned Ph.D., D.M.A., Ed.D., or equivalent
3. is engaged in an active program of research, scholarship, or creative activity, or demonstrates significant promise of establishing such a program

**Rights and Responsibilities of Graduate Faculty (Category P).** The faculty member
1. acts as the advisor for master's and doctoral students
2. participates in the governance of graduate education at all levels within the university
3. serves on doctoral examination committees
4. serves as a Graduate Faculty Representative on candidacy examinations and final oral examinations

**Minimum Category M Qualifications.** The faculty member
1. holds a regular, tenure-track, or regular clinical faculty appointment
2. holds a master's degree or higher, or equivalent

**Rights and Responsibilities of Graduate Faculty (Category M).** The faculty member
1. acts as the advisor for master's students
2. participates in the governance of graduate education at all levels within the university
3. serves on candidacy exam committees, but on doctoral examination committees only at the discretion of the Graduate Studies Committee.
MEDICAL SCIENTIST TRAINING PROGRAM (MSTP)

For the most updated description of the MSTP, please refer to the following website: <medicine.osu.edu/mstp>

The College of Medicine has an excellent program for combining clinical training leading to the MD degree with training in research culminating in the PhD degree. The Biomedical Sciences Graduate Program works closely with the Medical Scientist Training Program (MSTP) at all stages, from recruiting through to graduation with both degrees. This has resulted in a curriculum that minimizes redundancy and optimizes time utilization by the students without compromising the quality of education in either area.

Lead. Serve. Inspire will be the curriculum for tomorrow's medicine, designed to shape the physician for the future. The MSTP has worked closely with the Medical School and Graduate School Leadership to develop a curriculum specifically for MSTP students - the Lead. Serve. Inspire. Inquire. Investigate (or LSI³) curriculum. The LSI³ curriculum incorporates the new Medical School curriculum and the curricula of the Biomedical Sciences Graduate Program to provide MSTP students with a unique, rewarding, and challenging curriculum.

- Fully integrated basic science and clinical science
- Early longitudinal practice based clinical service that allows students to apply classroom knowledge to real patients
- Self-directed learning with multiple assessment methods to provide individualized learning by standardized outcomes
- MSTP Roundtable, a new course specifically designed for MSTP students, incorporates faculty and topics relevant to students seeking a career as a physician-scientist.
- During the time focused on dissertation research, all MSTP students participate in a Clinical Preceptorship.

Sample Course of Study

<table>
<thead>
<tr>
<th>Year in program</th>
<th>MSTP in Biomedical Sciences Graduate Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Med 1</td>
</tr>
<tr>
<td></td>
<td>MSTP Roundtable</td>
</tr>
<tr>
<td>2</td>
<td>Med 2 (through Dec 1)</td>
</tr>
<tr>
<td></td>
<td>Grad Yr 1</td>
</tr>
<tr>
<td></td>
<td>MSTP Roundtable</td>
</tr>
<tr>
<td>3</td>
<td>Grad Yr 2</td>
</tr>
<tr>
<td>4</td>
<td>Thesis Research</td>
</tr>
</tbody>
</table>

Revised 2015
<table>
<thead>
<tr>
<th></th>
<th>(formulate plan for med re-entry in Dec/Jan)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Med 3</td>
</tr>
<tr>
<td>8</td>
<td>Med 4</td>
</tr>
</tbody>
</table>
BIOMEDICAL SCIENCES GRADUATE PROGRAM

CONSTITUTION FOR THE INTEGRATED
BIOMEDICAL SCIENCE STUDENT ORGANIZATION

Article I - Name, Purpose, and Non-Discrimination Policy of the Organization

Section 1 - Name: Integrated Biomedical Science Student Organization at The Ohio State University (further referred to as IBSO)

Section 2 - Purpose: The main goal of IBSO is to provide support to all students enrolled in the Integrated Biomedical Science Graduate Program at The Ohio State University. It will also provide professional and social opportunities outside of the IBSO for its membership. The IBSO will strive to inform, interact with and serve the community, and public at large in ways related to biomedical research and education. The IBSO will also function as the communications vehicle between its membership and the faculty, staff, and administration of The Ohio State University.

Section 3 - Non-Discrimination Policy: The organization as a whole will not discriminate against any person or group of persons based on race, color, creed, religion, sexual orientation, national origin, sex, age, handicap, or Vietnam-era veteran status.

Article II - Membership: Qualifications and categories of membership

Section 1 - Membership will be open to all students in the Biomedical Sciences Graduate Program (BSGP), and those who are members of the M.D./Ph.D. program associated with the BSGP. All members of BSGP are full members of the organization. Members may choose not to be affiliated with IBSO after the first year of study. Full members are required to attend at least one meeting each quarter. Honorary membership is extended to all OSU faculty, staff and alumni.

Article III - Organization Leadership: Titles, terms of office, type of selection, and duties of the leaders

The organization leaders will be the President, Vice-President, Secretary, Treasurer and Service/Social Chair. The leaders will be nominated; either by the voting body or self-nomination, and a vote will be conducted to appoint the positions. All executive members must receive the majority of votes at the election meeting, held at the start of fall semester. The terms of office are on a one-year basis, with re-election limited to one term. All of the past year's executive committee, whose members are defined in Article IV, remain active members of the organization during the subsequent year. The Webmaster will be a non-executive leader of IBSO. The Webmaster will be nominated, either by the voting body or self-nomination and will be appointed by the President following the fall semester elections. The term of office is on a one-year basis; however, there is no limit to the number of terms.
President:
- Chair and conduct meetings of the main body and executive committee
- Represents the organization to the university
- Ensure that officers and Committee heads are fulfilling their job descriptions
- Ensure that the organization is abiding by rules and regulations of the university and of this Constitution.
- Ensure that Office of Student Activities (OSA) forms and paperwork are completed and submitted by their specified deadlines.
- Has the ability to make executive decisions in the event that an immediate decision is necessary, and no other executives can be reached. This power excludes all matters that require a vote of the general body or executive committee, such as amendments and dissolution of the organization, etc.
- Upon election, the president will be the organization's representative to the Council of Graduate Students.
- Appoint a Webmaster to maintain and keep current the IBSO webpage.
- Is jointly responsible for, along with the Vice-President, working with the BSGP coordinator to facilitate recruitment weekends

Vice-President:
- Aids the president at all general meetings and serves in the president's place when absent
- Is the representative to the Bennett Research Society
- Oversee spending of finances
- Is jointly responsible for, along with the treasurer, the management of a checking account for organizational funds.
- Is jointly responsible for, along with the President, working with the BSGP coordinator to facilitate recruitment weekends

Secretary:
- Is responsible for recording agenda/minutes from both the executive committee meetings and general body meetings, in addition to sending e-mail notices to the members of the IBSO.
- Is responsible for creating and maintaining a membership list
- Is a member of the Graduate Studies Committee

Treasurer:
- Has the responsibility of overseeing all organizational finances and expenditures
- Maintains the accounting in such a manner that he/she will not be personally made vulnerable by the mishandling of any other member
- Is jointly responsible for, along with the Vice-President, the management of a checking account for organizational funds.
• Must give quarterly reports to the executive committee concerning the state of the finances
• Responsible for year end audit as well as any other reports
• The Treasurer will be the IBSO representative on the OSUMC research day committee

Service/Social Chair:
• Is responsible for organizing/publicizing social events open to all IBSO members.
• Creates opportunities for IBSO members to be involved in community service/philanthropic activities

Webmaster:
• Has the responsibility for maintaining the IBSO website.
• Must attend at least one Executive Committee meeting per quarter
• Is responsible for timely updates to the IBSO website

Article IV - Executive Committee: Size and composition of the Committee
The executive committee comprises the President, Vice-President, Secretary, Treasurer and Service/Social Chair. The purpose of the executive committee will be to represent the organization as a whole in issues related to the well being of the student body. The executive committee will meet at least one week prior to a general meeting to discuss issues to be presented to the general body.

An advisory panel, composed of the executive board of the previous year, will be available to offer thoughtful insight to the members of the current executive board regarding executive duties as well as general operational concerns. The president of the previous year’s executive board will serve as the student liaison between the current executive board and the advisory panel. The advisory panel will not have voting authority. Any and/or all members of the advisory panel will attend executive meetings at the request of the current executive board.

A presentation of the executive positions by the current executive board will be made the 1st Friday of the fall semester to the incoming class. Nominations for executive positions will be made by email to the current president, and are due the following Thursday at 5:00pm. Voting will be held the 2nd Friday of fall semester.

Article V - Standing Committees: Names, purpose, and composition (Ad-Hoc committees) There are no standing committees within this organization. Ad-hoc committees will be established on a need be basis to help plan and organize special events.

Article VI - Method of Selecting and/or Removing Officers and Members
The organization is open to all students that are active graduate students in the Biomedical Sciences Graduate Program (BSGP) which is part of The Ohio State University’s Medical School. It is also open to students that are MD/PhD students and also accepted in the BSGP. Members are not selected nor removed as long as they are a student of the BSGP.
Officers are selected by an election vote during the Fall Semester by the first year graduate students in BSGP. Students can nominate themselves or others for positions. If multiple students are nominated for the same position then an election will be held. The first year students will vote for which candidates should have which positions.

Officers can be removed from their position at any time by a majority vote of the first year graduate students. Officers can also step down at any time if they have a replacement for the position that the first year graduate students agree to elect into the position. Officers can also be asked to step down by the faculty advisor.

In the event that a general member needs to be removed because of misconduct an election will be held amongst the officers of the club. Majority vote will decide if the member is to be removed from the organization. In the case of a tie then the faculty advisor will make the final decision. Once removed from the organization that person cannot rejoin. They can appeal this exiled status to the faculty advisor who will decide if this person is able to partake in organization events.

Article VII - Adviser(s) or Advisory Board: Qualification Criteria
The adviser(s) for IBSO will be a director or instructor of the Integrated Biomedical Science Graduate Program or a director or instructor of the M.D./Ph.D. program. If the same person fulfills both positions, then there will only be one adviser.

Article VIII - Meetings of the Organization: Required meetings and their frequency
General meetings of the organization will be held at a minimum of one time per quarter including the summer semester. If an issue arises during an interim period, the executive committee may call additional meetings.

Article IX - Method of Amending Constitution: Proposals, notice, and voting requirements

Section 1 - Amendments: Any executive committee member may submit amendments. A vote of the executive committee will take place at the next meeting and must be unanimous for the amendment to go forward. If the amendment goes forward, the details are to be debated, and proper language determined for presentation to the main body. A full member of IBSO may also present amendments. Said amendments must be in writing and contain the signatures of four-fifths members. The amendment is then presented to the executive committee; the executive committee is then required to follow the process laid out in Article VIII section 2.

Section 2 - The Executive Committee will present the amendment to the main body (via written documentation), and a vote will be taken on said proposal at the next appropriate meeting. A general announcement of the voting date must be made to the main group list at least one week prior to voting. A vote of at least three fourths of the voting membership present is required to pass the said amendment.

Article IX - Method of Dissolution of Organization
The executive committee has the authority to begin the disbanding of IBSO. Said motion must first pass the executive committee unanimously. If said vote is successful, the main group must also pass the motion by a three-fourths vote. If the group decides to dissolve, the executive committee is responsible to take care of all debts incurred by the group through the solicitation of donations and/or fundraising activities.
BIOMEDICAL SCIENCES GRADUATE PROGRAM
DISSERTATION DEFENSE PROTOCOL

THE STUDENT IS RESPONSIBLE FOR MAKING SURE THAT ALL REQUIREMENTS FOR GRADUATION HAVE BEEN FULFILLED

See Checklist for Doctoral Degree Procedures and Requirements for Graduation

↓

4 weeks prior to defense date submit booklet info to Program Office

→ Office makes booklet hard copies

↓

Content of booklet to be distributed at open defense seminar
(get page format Biomedical Sciences Graduate Program website):
DISSELECTION DEFENSE DATE/ROOM ASSIGNMENT FORM

NAME:

DATE OF DISSERTATION DEFENSE:

TIME OF OPEN DEFENSE:    ROOM ASSIGNMENT:

TITLE OF OPEN DEFENSE SEMINAR:

TIME OF CLOSED DEFENSE:    ROOM ASSIGNMENT:

BOOKLET INFORMATION SUBMISSION DATE:

Revised 2015