

Professional Development and Research Training Program



STUDENT HANDBOOK

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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 Master of Science in Medical Science Graduate Program, which should be reviewed and consulted in conjunction with the Graduate School Handbook, located online at <http://gradsch.osu.edu/graduate-school-handbook1.html>.

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Updated: July 2021

PART I. ACADEMICS

Section I. Purpose & Overview of the Program

The *Masters of Science in Medical Science* graduate degree program is designed to provide advanced degree training for physicians interested in pursuing a career in academic medicine. The coursework is selected from courses offered in the College of Medicine Biomedical Sciences Graduate Program (BSGP), College of Medicine Departments, College of Public Health and/or other Schools and Colleges at the Ohio State University. The program includes a mentored research project. Coursework is typically completed within two years or six academic semesters. However, the curriculum can be tailored and completed in one year or three semesters.

Academic Career Paths:

- Physician Scientist
- Clinician Educator
- Health Care Administration/Policy
- Biomedical Informatics/Research & Practice

Admissions Requirements:

- Must hold an M.D. or D.O. degree
- Must be enrolled in an OSU or Nationwide Childrens' Hospital sponsored residency/fellowship program
- Must be in good academic standing within the residency/fellowship program
- Must complete an OSU Graduate Admissions application form
- Must pay nonrefundable application fee
- Must provide transcripts as requested by the Graduate Admissions Office (GPA 3.0 in all prior undergraduate and graduate/professional coursework)
- Must meet the ESL & spoken English requirements established by the Graduate School, if applicable
- The GRE is waived (MCAT scores are used)
- Must provide 3 letters of recommendation:
 - Residency/Fellowship Program Director which includes information about departmental support, the trainee's advisor and research project, trainee's commitment of time and trainee's academic career path
 - Research Advisor
 - Faculty Member
- Must provide a brief Statement of Intent
- Current CV

Program Requirements:

- Student must complete **30 credit hours** of graduate courses including a core curriculum in research design, research ethics, statistics, and science communication as well as electives relevant to their career path and/or research project
 - Maximum 10 credit hrs/semester (maximum allowed benefit for university employees)
 - Program to cover two academic years (minimum 3 semesters)
 - Complete within five years from the date of matriculation into the program
- Student must submit a proposed course of study at the beginning of the program coursework to the Graduate Studies Committee
- Students must pursue a mentored research project
- Student must maintain a 3.0 GPA
- Students must participate in the Department of Surgery's James King Award Presentations

- Students are expected to submit an abstract for presentation at the annual Ohio State University Wexner Medical Center Trainee Research Day and at the Department of Surgery's Annual Research Conference
- Students must submit a paper, abstract, or poster for presentation at a state, regional, or national meeting and/or submit a paper for publication
- Student must present their culminating research accomplishments to the Graduate Studies Committee in lieu of a written thesis prior to program completion
- Student must present their research at a Department of Surgery Grand Rounds

Core Requirements:

- | | |
|--|---------------------------------|
| 1. Research Methodology or Research Design | (2 courses, 6 – 9 credit hours) |
| 2. Biostatistics | (1 course, 2 – 4 credit hours) |
| 3. Ethics | (2 courses, 3 – 4 credit hours) |
| 4. Grant Writing or Science Communication | (2 courses, 3 – 6 credit hours) |
| 5. Independent (Mentored) Research | (12 credit hours maximum) |
| | |
| Total Required Credits | (30 credit hours minimum) |

Graduation Information:

1. Register and enroll for at least 3 graduate credit hours during the semester in which graduation is expected.
2. Apply for graduation online via GRADFORMS. See the OSU Graduate School's webpage for specific instructions and deadlines. *Grad School deadlines are firm – no exceptions will be made for students applying past the deadline.*
 - Must enroll for minimum of 3 credits during the semester you are graduating
 - Complete the online Application to Graduate at least 2 weeks prior to deadline established by Grad School
 - Select "Masters – Non-Thesis"
 - *Graduate Studies Committee: please enter the following names ONLY on your Application to Graduate*
 - Ginny L. Bumgardner MD PhD FACS (Associate Dean for Research Education, Director of the DOS Research Training Program and Master of Medical Science)
 - Candidate's Research Advisor (Co-Advisor is optional)

***Students are welcome to invite other attendees to their pre-Grand Rounds and Grand Rounds presentations, but please only list the Graduate Studies Committee members noted above on your Application to Graduate.
3. Deliver a *Master's Examination* oral presentation about your research to the Graduate Studies Committee.
4. Deliver a *Grand Rounds* presentation to the entire Department of Surgery.

Section II. Program Benefits

CURRENT PROTOCOLS IN IMMUNOLOGY:

Current Protocols in Immunology (pdf's) is available online for free via Wiley Online Library (the COM has an institutional subscription). The text was originally published in 1991 and archived to 1992, and since then, the publisher has been updating online via supplements. Supplement 110 August 2015, for example, included updates for units 2.1, 3.20, 6.24, and 14.37. The publisher pushes out

supplements in February, April, August, and November of each year. The book's forward, preface, and individual chapters and content can be accessed as follows. Students can also browse by topic.

Go to <https://hsl.osu.edu/resources/ebooks>

Under Search Tools click on OSU Library Catalog near the center of the screen

Type in Current Protocols in Immunology, hit Submit

Under Current Protocols in Immunology click on Electronic Resources link

You will be redirected to the Wiley Online Library

ADDITIONAL TEXTBOOKS AVAILABLE:

Following is a list of textbooks available through the Prior Health Sciences Library. Hard copies of textbooks are also available in the Program Manager's office as noted.

Textbook Name	Edited By	Edition	Online? Yes/No	Web Link (if applicable)
Success in Academic Surgery	Chen and Kao	Part 1	Yes	e-book available through Prior Health Sci Library Textbook available in Anna's office
Success in Academic Surgery: Health Services Research	Dimick and Greenberg	n/a	Yes	e-book available through Prior Health Sci Library Textbook available in Anna's office
Essential Immunology for Surgeons	Eremin and Sewell	2011	No	Textbook available at Prior Health Sci Library; Textbook available in Anna's office
Cellular and Molecular Immunology	Abbas, Litchman and Pillai	9 th	Yes	e-book available through Prior Health Sci Library Textbook available in Anna's office
Roitt's Essential Immunology	Delves, Martin, Burton and Roitt	13 th	No	Textbook available at Prior Health Sci Library; Textbook available in Anna's office
Kuby Immunology	Owen, Punt, Stranford and Jones	8 th	No	7 th Edition Textbook available at Prior Health Sci Library; 8 th edition available in Anna's office
Janeway's Immunobiology	Murphy, Kenneth	9 th	Yes	Textbook available at Prior Health Sci Library
Molecular Immunity: a chronology of 60 years of discovery	Smith, Kendall A.	1 st	Yes	e-book available through Prior Health Sci Library

\$500 DEPARTMENT OF SURGERY BOOK ALLOWANCE:

While enrolled in the M.S. or other degree granting program, the Department of Surgery provides each student with a \$500 book allowance to be used on books, computer software, and other miscellaneous supplies. *This is a one-time allowance and does not transfer to the residency training program.* Students who wish to utilize this benefit may submit a written explanation of the purchase made and why, along with an itemized receipt showing the product/book purchased, date of purchase, method of payment (last four digits of credit card number), and name of purchaser to the Program Manager. Requests for reimbursement will be evaluated and approved on a case-by-case basis by the Program Director.

TRAVEL ALLOWANCE:

Due to budget constraints, travel funds are only available to DoS faculty, staff, and residents who are physically presenting research at conferences. Please contact the Program Manager, Anna Patterson, for details.

No travel plans should be made until after the trip is reviewed and approved by Dr. Harzman and the DoS Finance Manager.

Please see *Section XIX. Travel & Documenting Travel for University Business* for more detailed information related to travel.

Section III. Application & Admission to the Graduate School and COM MMS Program

Students will apply to the COM Master of Medical Science degree program online via the Graduate School. The online application form, deadlines, FAQ's, etc. are located online at <http://gpadmissions.osu.edu/>. The minimum Graduate School admission requirements, instructions for applying to the Graduate School, curriculum form, course enrollment, and information concerning graduation requirements are also located on the College of Medicine's website http://medicine.osu.edu/residents/masters_programs/pages/index.aspx and in our handout, *DOC3 MMS Admissions Checklist*. Please be aware that information published online supersedes any written materials provided by the program.

In order to be admitted to the degree program, **students must finalize their admission to the program**. It is very important that incoming students do three things to make sure they are officially admitted and will receive information on their course scheduling window and other important information:

1. Applicants must formally accept their offer of admission. First, activate your Ohio State User Name (lastname.#) if you have not already done so at <https://my.osu.edu>. Your OSU name.# account will be used to register for classes, pay fees, etc.
2. Accept Your Admission (a tuition fee or acceptance fee may be required): go to <https://gpadmissions.osu.edu/faq/#&&tab=admitted>, click on *Accept/Decline/Defer Admission*, click on *How do I accept an offer of admission?* and then click on appstatus.osu.edu. All students who accept an offer admission will be asked the **University Community Enrollment Question**: *Have you ever pled guilty to or been convicted of a felony, or is any felony charge currently pending against you?* Please be sure to see <http://enrollmentservices.osu.edu/community-enrollment-review/> before answering this question and for additional details.
3. Be sure you check your email account regularly. The Office of Student Services & Graduate Studies, as well as the University, notifies students of important information via email. Please Note: OCIO allows students to forward their name.# email to an alternate email address. We suggest you use your osuwmc.edu email address. Email addresses, such as Yahoo or Gmail, have spam filters set up that will kick back emails sent from the University via a listserv.

Section IV. Curriculum Plan Form (DOC7) & Curriculum Plan Approval Form (DOC 8)

Prior to registering for courses, students must complete the *DOC7 Curriculum Plan Form*. This form is the student's academic curriculum plan which they will follow for the period of time they are enrolled in the program. Students will review and select courses from the approved *DOC5 Core Curriculum Course List*, inserting their selections on the *DOC7 Curriculum Plan Form*. They should then take this form to the Program Manager who will ensure that the maximum credits per semester are not exceeded, and the appropriate courses and number of courses are planned for scheduling. The student will then take the *DOC7 Curriculum Plan Form* and *DOC8 Curriculum Plan Approval Form* to their mentor. The mentor and MMS Program Director, Dr. Bumgardner, must sign off on the curriculum plan. Upon receipt of all signatures, the student should return the approved *DOC7 Curriculum Plan Form* and *DOC8 Curriculum Plan Approval Form* to the Program Manager who will maintain these forms in the student's file.

Any changes to the approved *DOC7 Curriculum Plan Form* must be discussed with and approved in advance by the Program Director.

Section V. Course Load, Fees, & Scheduling Classes

Students are expected to enroll for classes each semester and to do so in a timely manner. No courses may be added or dropped past the University's published add/drop deadlines.

The Graduate School requires that all students must enroll for a minimum of 3 credit hours per semester. In addition, students must be enrolled for a minimum of 3 credit hours during the semester in which they plan to graduate.

As employees of the University with an eligible appointment, tuition assistance is provided by the University and pays the instructional, general, and non-Ohio resident fees for up to 10 credit hours per semester. A credit will appear on the student's fee statement. All other fees, including application fees, registration fees, late fees, COTA bus fees, student activity fees or Student Union fees, and withdrawal fees after the full refund period, are the responsibility of the student. Please refer to <http://registrar.osu.edu> for ALL fee and graduation deadlines.

You will be notified by the Registrar's Office, via email, with the date and time your scheduling window opens. Upon obtaining the required signatures and approval of the *DOC7 Curriculum Form*, the student may register for courses. Please be aware that Summer and Autumn Semester classes are generally scheduled during Spring Semester. Course Registration Fees & Tips, instructions on how to register for courses via Buckeye Link (<http://buckeyelink.osu.edu>), adding & dropping classes, waitlisting classes, etc. will be provided to the student at Orientation.

When registering for classes please mindful of any stated course prerequisites. Pre-reqs are in place to prevent students who do not have the necessary educational foundation from enrolling in the class. If a prerequisite is indicated for the course, the student must e-mail the instructor directly. Explain who you are (i.e. a PGY-2 or -3 surgery resident (with UG degree in xxxx and medical school training, etc.), that you are currently a postdoctoral fellow research trainee, and ask if you can enroll in the course. If the instructor replies that your background is still not sufficient, they will let you know what pre-req course(s) must be taken. If the instructor elects to waive the pre-requisite, a *Course Enrollment Permission Form* must be completed by the student, and signed by the instructor. Please see the Program Manager for the form.

*****You must WAIVE the student health insurance** at the time you register for classes in Buckeye Link, My Student Center. Failure to do so will cancel your employee health insurance, and we don't want this to happen. If you miss the waiver deadline, please follow the instructions outlined below for

requesting a waiver after the fact. Please note that when registering for Autumn semester, you will waive the insurance for the entire academic year.

*****Waiving Student Health Insurance:** Please log in at <https://shi.osu.edu/how-to-select-or-waive/waiving-procedures/>. Scroll down to the bottom of the page and click on petition to waive. Log in and complete the online form. Provide a reason why you want to waive the insurance (*I am a full time employee of the University and am already covered by the University's health insurance program* –or something similar will suffice). You may need to provide your insurance carrier's information. Have your insurance card handy.

FACULTY & STAFF TUITION PLAN:

The Ohio State University offers The Ohio State University Amended and Restated Section 127 Educational Assistance Plan (the "Plan"), also referred to as the **Faculty and Staff Tuition Assistance Plan**, to eligible faculty and staff. The Plan pays the instructional, general and non-Ohio resident fees (up to 10 hours per term, not to exceed \$9,640 per term) when an eligible employee enrolls in classes at Ohio State.

Tuition assistance under the Plan is provided on an academic term basis. After you have enrolled in your courses you **must enroll in the Plan via Workday** by completing the **Faculty and Staff Tuition Assistance Plan Application** for that term. You must enroll by the deadline stated on OSU HR's website, <https://hr.osu.edu/benefits/tuition-assistance/faculty-staff/>.

*****You must complete the Faculty and Staff Tuition Assistance Plan Application each term AND by the deadline stated on OSU HR's website.** If you fail to complete the application in Workday prior to the deadline, the tuition is your financial responsibility. OSU HR and the Department of Surgery will not make any exceptions.

CHANGES IN YOUR COURSE SCHEDULE:

The Graduate School manages all course scheduling changes for graduate students. The procedures are clearly outlined in the Graduate School handbook, *Section 3.4 Changes in Schedule*, <http://gradsch.osu.edu/handbook>. With advisor approval, students may make schedule changes. If the change requires course enrollment permission, the change must be made at the Graduate School.

All academic deadlines are clearly stated on the Registrar's webpage, <http://registrar.osu.edu/>. Students who wish to add or drop courses after the published academic deadlines must follow the procedures outlined on the Graduate School's website. Please note that various departmental and college signatures may be required.

COURSE ADDITION (Grad School Handbook Section 3.4.2): Students may add courses to their schedules online through the first Friday of the semester. After the first Friday of the semester, additions to approved schedules require the permission of the instructor and approval of the student's advisor and may be submitted on the *Course Enrollment Permission Form*. After the second Friday of the semester, any additions to the approved schedule is by petition to the Graduate School via the Graduate Student Course Petition form via GRADFORMS. Petitions must be approved by the instructor, advisor, and department chair. Petitions are reviewed in the Graduate School and are not always approved. Both the Permission and the Petition forms are available online on the Graduate School website. (<https://gradsch.osu.edu/handbook/all#3-1>)

COURSE ENROLLMENT PERMISSION FORM:

When instructor permission is required to enroll in a course (add a course after the 1st or 2nd Friday of the semester, waive pre-req requirements, enter a course requiring permission, override the limit and enter a full section, or schedule a class with a time conflict), the student must complete a *Course Enrollment Permission Form* and get the instructor's signature. Please contact the Program Manager for the form. The student will complete the *Student Information and Course Information sections* of the

form, and then scan & email or hand-deliver to the instructor with a request for permission to enroll. The instructor will sign and return the form to the student. Once all signatures are obtained, the student is to bring the form to the Program Manager who will then forward to the University Registrar for processing.

COURSE WITHDRAWAL:

Course withdrawals are handled by the Graduate School and require approval of the student's advisor. Please see the Graduate School's webpage for additional details, <https://gradsch.osu.edu/handbook/all#3-1>.

TUITION EXCLUSION & EMPLOYEE FEE AUTHORIZATION:

Under IRS rules, graduate-level tuition benefits provided to you pursuant to the University's Faculty & Staff Tuition Assistance Program are considered exempt from taxation up to a maximum of \$5,250 per year. *Graduate-level tuition benefits over the \$5,250 amount are subject to taxation and reporting on Form W-2.* The tax withholding consists of the following components: federal, state and city taxes; as well as Medicare and school district taxes, as applicable. The additional tax to be withheld from your paycheck on the fee authorization income will be calculated using the most recent W-4 exemption information submitted by you.

However, certain job-related tuition assistance benefits in excess of \$5,250 are not subject to taxation if they meet the requirements of a "working condition fringe benefit" under Section 132(d) of the Internal Revenue Code.

Students Entering their Degree Programs Autumn 2016 or Later: With the exception of Masters of Medical Science degree program, Payroll Services does not currently make determinations concerning the "working condition fringe benefit" for students entering their respective degree programs Autumn Semester 2016 or later. These students must work directly with their personal tax advisor to determine if their tuition meets the definition of "working condition fringe benefit". Students will need to provide their tax advisor with the following documentation:

- course names and numbers
- course descriptions
- copies of fee statements
- other documents as requested by their tax advisor

Students are strongly encouraged to contact a tax advisor to discuss the financial implications, their eligibility for the "working condition fringe benefit", and to verify what documents must be presented for attachment to their tax return upon matriculation to the degree program. If you do not have a tax advisor, your peers may be able to refer you to one, or you may contact the OSU Employee Assistance Program at 800-678-6265, <https://hr.osu.edu/benefits/eap/> (username is "buckeyes").

Students holding the Postdoctoral Fellow Appointment: Please note that the University does not withhold taxes on tuition over the exemption of \$5,250 for students holding the Postdoctoral Fellow appointment. You are responsible for working with your personal tax advisor and filing quarterly taxes. Additional details are provided in Section XXI. Payroll & Taxes of this handbook as well as online at College of Medicine's webpage, http://medicine.osu.edu/research_ed/postdoc/current_postdocs/pages/index.aspx, Benefits, Compensation, and Taxes.

Section VI. Academic Standards & Academic Misconduct

While enrolled in their university graduate program, students will adhere to the rules and intent of The Ohio State University Graduate School and the University Code of Student Conduct.

Academic Standards - Master of Science in Medical Science:

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 two academic semesters or sessions. As per university rules, students whose GPA remains below 3.0 following two semesters or sessions of academic probation will be denied future registration in this degree 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.

OSU takes academic misconduct very seriously, as should you the student, since this type of misconduct undermines the integrity of the university as well as the degree the student is working so hard toward obtaining. 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. Whether or not you intended to plagiarize is irrelevant. Please take a moment, too, to review <https://library.osu.edu/find/resources/citation-examples/> from the OSU University Libraries. 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.

Section VII. Class Attendance

The Graduate School permits each department or school to make its own rules relative to occasional absences by students from scheduled activities under the University's Bylaws, Codes, and Rules, *Chapter 3335-9 Attendance and Graduation, Section 21 Absences*. If, however, a student is absent from a course to such an extent as to imperil his or her credit, or is notably irregular in attendance, it shall be the duty of the instructor to report the facts promptly to the dean of the college in which the student is enrolled. The dean may take such action as deemed appropriate.

Students are permitted one (1) pre-scheduled absence from each Surgery 8501 (Career Development for Surgeons), Surgery 8900 (Applications of Immunology in Surgery), and Surgery 7010 (Seminar in Practice Management) per semester. Planned absences, including lab obligations such as experiments & meetings, will be communicated to the Research Program Manager at least one week in advance of the date the absence is to occur. Absences due to emergencies will be handled on a case-by-case basis.

All absences, regardless of the reason the absence occurs, are to be timely communicated by the student to the Research Program Manager for the instructor's review and consideration. Please do not ask your peers to notify the Research Program Manager that you will be absent from class - your absence will be unexcused. Students receive all University holidays. For all other courses, students should review their course syllabi for specific attendance policies and academic standards.

An *Application for Leave Form* must be completed and approved prior to taking time off for vacation, university business from the worksite, family or medical leave, illness/injury, medical appointments, etc. Paperwork for *Family Medical Leave* must be filed with the University 30 days prior to the event occurring. Please see the Research Program Manager for assistance.

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, including those scheduled between semesters. Students are expected to take all exams as scheduled.

SECTION VIII. Graduate School Learning Assessment Plan

Assessment at the graduate level is an important aspect of Ohio State's accreditation by the Higher Learning Commission. The goal of assessment is to improve the quality of education by defining learning outcomes and gathering data about our students' accomplishments. Assessment allows informed decisions about how to improve the graduate student learning process.

The Graduate School has assisted programs with developing and implementing assessment plans. Programs are required to collect direct and indirect evidence, provide web-based resources of the management and analysis of evidence, and provide programs with guidance and workshops.

Each graduate program's assessment plan includes clearly stated learning goals, a method for collecting evidence for each of these outcomes, and a process for using the information for ongoing improvement of the program. Programs will be able to use their data to self-determine their success in reaching their outcomes at regular intervals. The defined learning outcomes for the Master of Science program are:

1. Students will be able to effectively communicate work through both written and oral communication;
2. Students will be able to effectively and logically design translational research projects;
3. Students will learn the importance of translational research ethics and responsible conduct of research, and how it applies to their own work;
4. Students will gain a basic knowledge of biostatistics, including how to practically use this skill in project design and analysis;
5. Students will be able to effectively identify funding opportunities relevant to their area of interest and prepare research grant proposals to NIH and other extramural sponsors in a manner to optimize successful funding.

The following direct and indirect measures of student learning have been identified for each of the identified learning outcomes:

Direct Measures:

- Communications Assessment Evaluation (Project Proposal, Quarterly Meetings, Master's Exam)
- Coursework
- Participation & Evaluation in journal club

Indirect Measures:

- Postdoctoral Evaluation
- Grant application & submissions
- Abstracts and Manuscripts submitted & accepted for publication/presentation
- Oral & poster presentations at society meetings (local, national or international)
- Pre- & Post-Skills Self-Assessment (self-assessment of skills & abilities)

So the program may accurately report to the Graduate School the accomplishments of our students and document its progress towards the achievement of its learning outcomes, it is imperative that students provide the Research Program Manager with copies of documentation for all grant applications, abstract and manuscript submissions and whether or not those submissions were accepted, and all oral and poster presentations.

Criteria

The standards the program will use to evaluate the quality of student learning for each goal and associated outcome are indicated below. Programs are to indicate both the minimum criteria required to assert a learning outcome (and thus collectively with other outcomes the associated goal) was achieved, and criteria of excellence the program is striving to achieve.

Direct Measures	Minimal acceptable criterion for this supporting outcome method is 75% of students obtaining a rating of meets expectations or higher on the identified assessment task for the measurement of achievement for this outcome. When 90% of the students earn a rating of meets expectations on the selected assessment associate task, the performance standard constituting programmatic excellence for this learning outcome measure will be attained.
Indirect Measures	Minimal acceptable criterion for this supporting outcome method is 50% of students obtaining a rating of meets expectations or higher on the identified assessment task for the measurement of achievement for this outcome. When 75% of the students earn a rating of meets expectations on the selected assessment associate task, the performance standard constituting programmatic excellence for this learning outcome measure will be attained.
Pre- & Post-Skills Assessment Only	Pre- and Post-Skills Assessment: Using a 5-point Likert scale, students are asked to rate their perception of their knowledge, skills, and abilities for various topics such as immunology, cancer biology, health care policy & economics, leadership skills, research design, analysis, & methods, human subjects research approval, laboratory techniques & skills, research ethics, scientific writing & grants, and scientific communication & presentation skills. There is no minimum or maximum score per se. We are assessing progression in the student's skill set from the beginning of the training program to the completion of training.

Section IX. Graduation

Graduation is a process that must be planned and managed to ensure timely progress towards degree completion. Planning by students is essential because there are many steps and procedures that must be navigated in completing a degree. [Current students](#) can log into the Graduate School's website for information regarding forms, guidelines, policies, graduation requirements, exam and graduation deadlines, etc. Detailed information regarding [degree completion requirements and FAQ's](#), deadlines, the *Final Semester Checklist*, etc. can be found on the Grad School's website. Information regarding the Master's Examination can be found online at <http://www.gradsch.osu.edu/masters-examinations.html>. The application for graduation completed online via GRADFORMS, <https://gradforms.osu.edu>. Questions can be directed to the Research Program Manager or Graduation Services at grad-schoolgraduationservices@osu.edu or 614-292-6031.

Students must enroll for a minimum of 3 credit hours during the semester in which they plan to graduate. Upon notification by the student that she plans to graduate, the Program Manager will pull the student's Advising Report and verify that the student has completed or is in the process of completing at least 30 credit hours and has earned a cumulative grade point average of at least 3.0 on a 4.0 scale (B average).

The student will complete the Graduate School's online *Application to Graduate* (via GRADFORMS), <http://www.gradsch.osu.edu/masters-examinations.html> at least 2 weeks prior to the Graduate School's published deadline. See the Grad School and University Registrar's webpages for specific guidelines, deadlines, and instructions. **The Graduate School will make no exceptions for students who miss the Application to Graduate deadline.

The Research Program Manager will arrange your Master's and Grand Rounds presentations. These presentations must be scheduled at least 2 weeks prior to the Graduate School's published submission deadline for the Master's Examination Report.

The candidate, the candidate's advisor, and the candidate's Graduate Studies Committee must attend the student's Master's presentation. For the Department of Surgery, the Graduate Studies Committee Members consist of at least:

- ◆ Ginny L. Bumgardner MD PhD FACS (Associate Dean for Research Education, Director COM MMS)
- ◆ Candidate's Research Advisor
- ◆ Co-Advisor (optional)

****Students are welcome to invite other attendees to their Graduate Studies Committee presentation and Grand Rounds presentation, but please only list the Graduate Studies Committee members noted above on your Application to Graduate. Please notify the Program Manager if you plan to invite other attendees.*

The Graduate Committee Members will complete the Master's Examination Report form upon the conclusion of the Graduate Studies Presentation and Grand Rounds presentation.

PART II. The Mentor – Trainee Relationship

Section X. Roles & Responsibilities of the Mentor

The mentoring provided by the faculty advisor is critical to the success of our trainees and their career development and advancement. Faculty mentors are expected to provide trainee oversight by setting up dedicated meetings with the trainee at regular intervals (every 3 months minimum) to discuss technical challenges and solutions, project progress and deadlines, career development, setting next step goals & objectives, timelines for abstract/grant submission, interpersonal and leadership skills, professionalism, etc. It is expected the mentor will:

- Ensure that mutually understood expectations and goals are in place at the outset of the postdoctoral training period;
- Meet on a regular basis to establish and foster a career development plan and to assess important aspects of the postdoc's progress;
- Respect the postdoc's individuality, working style, and career goals while still holding the postdoc accountable. Be aware that the rate of progress made by postdoc's will vary;
- Maintain an atmosphere in which the postdoctoral fellow feels free to approach him/her for advice or discussion of differences of opinion;
- Encourage the postdoc to seek advice and collaborate with others since the training experience can benefit from a variety of perspectives;
- Promote ethical standards for conducting research, including compliance with all institutional & federal regulations;
- Accord full recognition of the postdoc's contributions to scholarship, including appropriate authorship of published work;
- Establish clear plans for how work will be divided when the postdoc completes his/her training;
- Support the postdoc's use of the full benefits of his/her employment, including vacation time.

In addition, it is expected that the faculty advisor will:

- Attend the James King Award Presentations (usually held in July of each year);
- Review and approve the trainee's Curriculum Study Plan. Dr. Bumgardner will also review for final approval;
- Attend all Quarterly Progress Update Meetings (dates TBA, generally held late afternoon);
- Complete assigned semi-annual Evaluation of Trainee (via E-value);
- Attend the Master's Examination Committee and Grand Rounds presentations (completed during last semester of degree program);

- Complete the online Master's Exam Form via GradForms (online, completed prior to trainee's graduation).

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.

Minimum Category P Qualifications: The faculty member holds appointment as a regular, tenure-track, faculty member, holds an earned Ph.D., D.M.A., Ed.D. or equivalent, 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 acts as the advisor for master's and doctoral students, participates in the governance of graduate education at all levels within the university, serves on doctoral examination committees, serves as a Graduate Faculty Representative on candidacy examinations and final oral examinations.

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

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

Section XI. Roles & Responsibilities of the Trainee

Residents in their professional development year(s) are trainees working in an apprenticeship mode in preparation for a career as physician-scientists. Trainees are expected to function responsibly and autonomously while continuing regular communication between the trainee and faculty mentor, and the trainee and administrative staff. Regular communication between all parties is critical to the success of the trainee.

Trainees are expected to:

- Assume primary responsibility for the development of his/her research and career
- Take initiative for self-directed learning and professional and career development
- Seek career and research advice, both from the faculty mentor and from other faculty as appropriate;
- Perform the research required by the faculty mentor to a high standard and in accordance with all institutional and federal regulations;
- Participate in postdoctoral career development and the review process;
- Work in a collegial and cooperative manner with the faculty mentor, co-workers, and administrative staff;
- Meet on a regular basis to establish and foster a career development plan and to assess important aspects of the postdoc's progress.

In addition, it is expected that trainees will:

- Present research at the James King Award Presentations (generally held in July each year);
- Complete and pass CITI training prior to the start of the research experience;
- Continue to meet the residency training requirements set for by the GME office;

- Check his/her stipend sources to be sure supplemental (moonlighting) compensation is permitted;
- Complete and return the Tuition Assistance Exclusion Form prior to established deadline each semester (do not complete this form if your stipend source is a T32);
- Provide Anna and Dr. Bumgardner with frequent updates of all funding applied for (regardless of whether or not awarded) and all abstracts submitted (regardless of whether or not accepted for presentation);
- Schedule courses in a timely manner to avoid late fees. DO NOT sign up for student health insurance;
- Refer back to his/her Curriculum Study Plan often to be sure (s)he is on track with the course work. Any changes to the approved curriculum plan need to be reviewed and approved in advance by Dr. Bumgardner and the research mentor;
- Attend all Quarterly Progress Update Meetings (dates TBA, generally held late afternoon);
- Complete assigned quarterly Evaluation of Mentor;
- Submit abstracts for OSUWMC Research Day and DOS Research Day;
- Present research to the Master's Examination Committee and Grand Rounds (completed during last semester of degree program);
- Pay quarterly taxes (only trainees receiving a stipend from the University Fellowship, a T32, etc.).

Communicate, Communicate, Communicate!!! The administrative staff is here to assist you in every way possible and wants your professional development year(s) to be of the utmost value to you. If you feel your lab experience is not going well for whatever reason, please see the Program Manager, and she will arrange for you to meet with Program Director.

PEER – BUDDY RESEARCH ASSIGNMENTS

During their PGY-1 year, residents will be assigned a Peer-Buddy. The Peer-Buddy is someone who is currently enrolled in the program or who has recently graduated. This individual partners with the student to assist them with day-to-day aspects of navigating the lab and research environment, graduate coursework, and graduate school requirements and deadlines. Students are expected to continue to check in on a regular and frequent basis with the Program Manager and Program Director throughout the course of their research training.

Section XII. Procedure Changing Research Mentors or Dissertation Advisor

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

- 1) Prior to seeking another research mentor/advisor, the student and research mentor/advisor should hold discussions together to determine if the problems or situation can be satisfactorily resolved without changing the training environment and relationships.
- 2) If a resolution between the student and research mentor/advisor cannot be reached and the student or mentor wish to change the research mentor/mentee relationship, the student should contact the Program Manager who will arrange a meeting with the student, the research mentor/advisor, and the DOS Research Training Program Director. Additional meetings with the DOS Residency Program Director, the Vice Chair for Surgical Education and/or the Department Chair may be convened as needed. The issues and any reasonable alternatives should be thoroughly discussed at the meeting. A meeting summary will be distributed to the involved parties for review and concurrence and a finalized copy will be maintained in the Department of Surgery's Surgical Education file. If a resolution to continue the mentor/mentee relationship is agreed upon, then mutually agreeable research education and training milestones will be established and follow-up meetings with the Research Training Program

Director will be scheduled to assess continued mentor/mentee satisfaction and research progress. If a resolution to change labs is agreed upon, then the relevant changes in financial and mentorship commitments and the Masters Committee composition will be made.

Part III. Funding & Conducting Research at OSU

Section XIII. Funding Your Research

General policies for Graduate Fellowship appointments are outlined in The Ohio State University Graduate School Handbook at <http://www.gradsch.osu.edu/handbook/all> and on the College of Medicine's website at https://medicine.osu.edu/research_ed/postdoc/prospective_postdocs/pages/index.aspx, *Info for Current Postdocs*. Policies specific to the Master of Science in Medical Science Program (MMSp) differ slightly and are described as follows.

Over the years the Department has expended considerable effort and finances towards recruiting talented surgical residents and supporting their professional development in a structured advanced degree and research training program. Consequently faculty now have access to a cadre of talented surgical residents to recruit into their research programs. The DOS supports career development and preparation for the research training experience at multiple stages beginning upon entry into the residency training program. This preparation includes many things including advice about mentor selection, degree requirements, course selection, information about the NIH loan repayment program, research productivity expectations, sources of stipend support, extramural award opportunities, assistance with application preparation and submission, letters of support as needed, etc. Career development types of extramural awards are reviewed based on a variety of criteria including candidate potential, mentorship, research soundness, training program content and environment, and institutional commitment.

Our financial approach toward resident research training is a shared one between the Department of Surgery and the research mentor(s). This is reflected in the Memorandum of Understanding (MOU), a form that binds the agreement that the faculty research advisor will support the resident student with a stipend throughout the training period until graduation. Faculty who agree to participate as research mentors do so with the understanding that they agree to support 50% of the resident student's stipend and benefits. By starting early in their PGY-1 year, resident students can apply for funding to various surgical societies, NIH, intramural OSU T32s, Pelotonia Fellowship program and other sources to help support their stipend during the training period. Resident students are encouraged to apply to many funding sources. Resident students who successfully obtain competitive external/internal funding to support their stipend reduce the financial responsibility for salary and benefits equally between the DOS and the mentor(s). For example, if a resident student's stipend is \$50,000 and he/she receives an award for \$30,000, then the remaining financial commitment (\$20,000 total + benefits) is shared equally by the DOS and mentor(s). The Chair of the Department of Surgery also agrees to acknowledge that the DOS will financially support the student should the advisor have difficulty with funding.

The RTP *Funding Opportunities* spreadsheet is updated annually by the program and lists a number of possible funding sources for residents participating in the RTP. Please be sure to visit the webpages listed for up-to-date information.

The Program Director is available to discuss this policy with the research mentors prior to the resident beginning the research training experience, at DOS activities (such as Grand Rounds, Fall Research Opportunities Session), DOS Annual Research Conference, at RTP quarterly meetings, and in scheduled individual meetings. Extramural awards are routinely discussed at the quarterly RTP meetings and at the annual mentor meeting held each spring. Mentors are invited to attend all meeting/presentations especially those where funding for resident research trainees is discussed.

FUNDING FROM MULTIPLE SOURCES:

Many funding sources have specific guidelines and restrictions concerning supplementation of stipends, additional compensation, and multiple job appointments. Housestaff, in conjunction with their Advisor, program coordinator, the postdoc office, and SPO (Sponsored Program Officer), are responsible for reading and understanding the terms and conditions of the award(s) they are considering accepting.

Funding sources usually stipulate in the Terms & Conditions whether or not they must be the primary funding source. Sometimes this information is located only in the T32, so check with your advisor if you cannot locate this information in the copy of the Terms & Conditions you have been provided. Examples of primary funding sources are the University Fellowship and the T32's; therefore, housestaff may not accept both the University Fellowship and a T32. However, the T32 and University Fellowship both permit supplemental funding. (See Supplemental Graduate Associate Appointment under University Fellowship for additional information)

Professional societies which offer grants generally have award stipulations as well. The ASTS Scientist Scholarship, for instance, states that "awardees may not concurrently receive any other financial support from AST, ACS, SUS, or other society granting similar funding." Likewise, some societies reserve the right to review potentially overlapping awards and to adjust their award accordingly. Please be sure to read and understand the terms of the award(s) before accepting!

GRANTS.GOV and InfoED SPIN:

Check out these websites for funding sources opportunities:

Grants.Gov (<http://www.grants.gov/>)

InfoED Spin (<http://infoedglobal.com/>)

OSU Administrative Research Council: <http://go.osu.edu/funding> or
<https://carmenwiki.osu.edu/display/10040/Funding+Opportunities>

JAMES KING AWARD:

The intent of the James D. King Research Award is to promote excellence in surgical research and training. The award honors the memory and vision of James D. King MD, PhD, a surgeon scientist who trained at The Ohio State University. Dr. King's son, Richard King MD, established the endowment which funds this award during his fifth year of general surgery residency training in memory of his father.

The James D. King Research Award competition has been held since 2005 and serves a number of purposes. The first is to introduce your research projects and plans to the Department of Surgery leadership, faculty, and current Master of Science students. Second, it provides the opportunity for students to receive external critique in advance of beginning their project. This external critique allows for further refinement of the focus or experimental design of the project and provides helpful suggestions to assist students in achieving their research project goals and objectives. Third, it provides the student with experience in developing his/her science communication and oral presentation skills. Finally, the competition provides a forum for facilitation, discussion, and interaction amongst the students regarding their respective projects.

In July first year lab students will give a ten minute presentation regarding their research project at the beginning of their research year(s) to the Graduate Studies Committee, research advisor, DOS Research Training Program Director, General Surgery Program Director, Vice Chair for Education, Vice Chair for Research and/or Department of Surgery Chair (Drs. Bumgardner, Harzman, Arnold, Sen and Pawlik). The winner of the competition will receive a monetary award which can be applied toward travel expenses to conferences and educational materials.

National Institutes of Health (<https://researchtraining.nih.gov/>):

Residents and students can now easily view available NIH institutional research training opportunities at <https://researchtraining.nih.gov/programs/training-grants>. Hover over *Career Path* then select *Postdoctoral Training/Clinical Residency* > *Research Training Kiosk*. Select your *Role* and then select your *Career Level* and click *Apply Filter*. A list of *Current Funding Opportunities* will pop up for you to choose from. The website also lists recent announcements for awards and additional resources such as information for applicants & awardees, FAQs, Policies & Notices, Data, Outcomes & Evaluations, and Career Guidance/Development.

NIH Loan Repayment Program:

The NIH Loan Repayment Programs (LRPs) are a set of programs established by Congress and designed to recruit and retain highly qualified health professionals into biomedical or bio-behavioral research careers. The application periods and documentation deadlines vary. Additional information, including eligibility requirements and the five repayment programs, can be found online at <https://researchtraining.nih.gov/programs/other-training-related>.

PELOTONIA Fellowship Program:

The Pelotonia Fellowship Program trains promising and accomplished undergraduate, graduate, medical, and postdoctoral students from any discipline at Ohio State who have the potential to become independent cancer researchers. The awards are made by a Pelotonia Fellowship Committee which oversees the program and includes some of Ohio State's most distinguished basic, translational, and clinical researchers from many disciplines.

The Pelotonia Postdoctoral Candidate Fellowship Program provides two-year research fellowships to the most promising postdoctoral candidates who want to help cure cancer. Cancer is a complex disease, and curing it will take a multidisciplinary effort. So no matter what their field of study, from the traditional science fields to fields such as history, business and computer science, all postdoctoral candidates may apply. The postdoctoral fellowship pays a competitive annual stipend based on NIH guidelines. Applications are generally due in October of each year with a start date the following spring. Please see <http://cancer.osu.edu/research-and-education/pelotonia-funded-research/pelotonia-fellowship-program> for additional information and full guidelines.

SOCIETY OF UNIVERSITY SURGEONS:

The Society of University Surgeons offers several resident scholar awards each year including the Karl Storz Research Award and the SUS Foundation Resident Scholar Award. Applications and detailed instructions are generally made available online mid to late April, www.susweb.org. The application window is very short, usually two weeks, so plan accordingly. For the 2016 applications, residents needed to submit the following documentation: Research Application (Hypothesis & Specific Aims, Significance & Innovation, Approach, Career Plan, and References), Institutional & Human/Animal Authorization Forms, 3 letters of recommendation, and Biosketches in NIH format, and Facilities & Resources Description.

SUS Foundation Resident Research Scholar Award is a one-year award of \$30,000 and is open to surgical residents who will have completed a minimum of two years of clinical training in the United States or Canada by the start date of the award (July 1st of each year) and agree to spend at least one year doing full-time research with a SUS member.

SUS-KARL STORZ Resident Research Scholar Award is intended for residents in any of the surgical disciplines who are doing research focused on surgical innovation, bioengineering, information technology and data management, or surgical education utilizing new technologies. This is a one-year

award of \$30,000 and is open to surgical residents who will have completed a minimum of two years of clinical training in the United States or Canada by the start date of the award (July 1st of each year) and agree to spend at least one year doing full-time research with a SUS member.

Please be aware that eligible residents agree to spend at least one year in full-time research with a SUS member. Co-mentoring by a non-SUS member is acceptable providing there is clear documentation of a collaborative relationship between the SUS research mentor and the non-SUS research mentor. If your mentor is not a member of SUS, please see the Research Program Manager or Program Director for assistance.

UNIVERSITY FELLOWSHIP:

Students with a cumulative undergraduate grade point average 3.6 on a 4.0 scale and who have developed a mentored research proposal by Fall of the year prior to the research training period may be nominated for the University Fellowship by the Program Director. Tenure is 12 consecutive months and provides a \$26,316.00 annual stipend (\$2,193.00 per month) for the 2019-2020 academic year. As mentioned above, the University Fellowship is a primary funding source. As such, recipients of this award are not permitted to accept funding from other sources (i.e., T32, TL1, etc.). *If accepting the University Fellowship award, please be aware that there will be significant changes to your annual pay and university benefits.*

A NOTE ABOUT TRAVEL AWARDS:

In addition to offering opportunities for stipend support, a number of societies offer postdoctoral fellows, residents, and graduate students the opportunity to apply for travel grants through their organizations. These awards are usually meant to help defray the cost of attending the society's annual meeting. Please be sure to apply for these when applicable. As always, be sure you understand the criteria for applying, including membership requirements if applicable, how to claim the award, the allowable expenses, etc.

Travel awards recently won by our resident students include:

- OSU Council of Graduate Students (<https://cgs.osu.edu/>): **Edward J. Ray Travel Award for Scholarship & Service** (4 funding periods annually) encourages and enables graduate students across the university to participate in professional conferences, both in their respective fields and in the broader academic community, by reimbursing or partially reimbursing the expenses incurred by graduate students during travel to conferences and meetings to present original research.
- OSU Annual Trainee Research Day (OSU College of Medicine)
- The American Association of Immunologists AAI Travel Grant (<http://www.aai.org/>)
- AASLD Young Investigator Travel Award (<http://www.aasld.org/>)
- Association for Academic Surgery Travel Grant for AAS Fall Courses (<http://www.aasurg.org/>)

Section XIV. Procedure for Applying for NIH Funding (K, F, & T Series)

On December 3, 2019 the National Institutes of Health and AHRQ has announced changes to the policies, Instructions and Forms for Research Training Grant, Fellowship, and Career Development Award Applications (Notice Number: NOT-OD-20-033). ***These application forms and instructions are for due dates on or after May 25, 2020*** and are as follows. Please be sure to address these points in your F32 application in consultation with your research mentor and Dr. Bumgardner.

- In describing their training goals and objectives in the Program Plan attachment, fellowship candidates will be expected to address, as applicable, any new research skills they plan to acquire in the areas of rigorous research design, experimental methods, quantitative approaches, and data analysis and interpretation.
- In the Research Strategy section of the Program Plan attachment, fellowship candidates will be expected to describe (a) the strengths and weaknesses in the rigor of the prior research that serves as the key support for the proposed project, (b) plans to address any weaknesses in the rigor of the prior research, (c) how the experimental objectives proposed will achieve robust and unbiased results, and (d) how relevant biological variables are factored into research designs and analyses.
- If applicable, fellowship candidates will be required to include the Authentication of Key Biological and/or Chemical Resources attachment.
- Applicants for diversity-related fellowship programs will be expected to attach a Description of Candidate's Contribution to Program Goals, explaining how the candidate's participation would further the goals of the program to promote diversity in health-related research.

Following is the OSU College of Medicine Proposal Process for applying for NIH K, F, or T Series funding. Please be aware that the timeline from application preparation to funding start date is approximately 18 months.

Activity Code	Cycle 1 Due Date	Cycle 2 Due Date	Cycle 3 Due Date
T Series (Institutional National Research Service Awards)	Jan 25	May 25	Sept 25
F Series Fellowships (including F31 Diversity) Individual National Research Service Awards [Standard] NOT-OD-17-029	April 8	Aug 8	Dec 8
K Series (Research Career Development)	Feb 12	June 12	Oct 12

Internal links which may provide useful information to you during this process are the, College of Medicine Office of Research (<http://medicine.osu.edu/research/Pages/index.aspx>), Center for Clinical & Translational Research (<https://ccts.osu.edu/>), Office of Sponsored Programs (<http://osp.osu.edu/>, Cayuse & PA-005), and the OSU Office of Research (<http://research.osu.edu/>).

COM PROPOSAL PROCESS:

1. Planning: Applicants should start planning *early*. Search for the right funding opportunity on websites such as include Grants.Gov (<http://www.grants.gov/>), and InfoED Spin (<http://infoedglobal.com/>), collect preliminary data, and determine internal and external deadlines.
2. Contact Barb Shramo, Sponsored Program Officer, COM Grants Management Office, at 614-292-1476, as soon as you decide to apply for funding. Ms. Shramo will review the RFA and begin working with you to build a budget and to review the materials that will be needed and the timeline for a complete submission by the due date. It is best to plan this meeting or phone call with Ms. Shramo two to three months in advance of the due date.

Complete ePA-005: This is an internal form to request approval to apply for outside funding located online at <http://osp.osu.edu/>. The Department of Surgery and the COM will need to approve.

3. Start writing your grant several months prior to the due date. The following information will need to be provided: Project Summary, Project Narrative, Specific Aims, Research Strategy; Bibliography, Budget & Justification (your Grants Manager will assist with this), Vertebrate Animals, Human Subjects, Facilities & Resources/Equipment, Consortium Agreements, Cover Letter, Mentoring Plan, Data Sharing, Reference Letters, Career Development Plan, including candidate's background, career goals & objectives, training during award period, responsible conduct of research, mentor statement, institutional environment/commitment.
4. Contact Barbara Shramo, at 614-292-1476, shramo.4@osu.edu, for assistance with setting up an *NIH eRA Commons account* 6 - 8 weeks prior to submission deadline. Be sure to follow ALL of the submission guidelines; otherwise, the NIH may delay processing or return your application without peer review. Information regarding the eRA Commons account can be found on the NIH webpage at https://era.nih.gov/commons/faq_commons.cfm.

The Grants Manager will review all proposal forms for you, including the biosketches, specific aims, research plan, etc., ensuring guidelines have been met, and will upload these forms into the application.

Once all documents are uploaded, the Grants Manager will send you a final draft of the proposal for your review and edits. After your approval has been given, the Grants Manager will contact your Sponsored Programs Officer for final review and submission.

5. Applications who are compliant with NIH policies are assigned for review by the Division of Receipt and Referral in the Center of Scientific Review (CSR) within 1 – 3 months of receipt. CSR assigns the application to an NIH Institute/Center (IC) and a Scientific Review Group (SRG). The Scientific Review Officer (SRO) assigns applications to reviewers and readers.
6. SRG members review and evaluate the applications for scientific merit sometime during months 4 - 8. Impact Scores are made available to the PI on eRA Commons. Depending on the score, the application is then proceeds to Second Level of Review where it is reviewed by an Advisory Council/Board. A Summary Statement is then made available to the PI on eRA Commons.

TIPS FOR NIH F32 APPLICATIONS:

Grants Admin contact is Barbara Shramo, at 614-292-1476, shramo.4@osu.edu.

- F32 and other grant due dates (April 8, August 8, Dec 8) <http://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/standard-due-dates.htm>
- F32 Funding Opportunity information (parent F32) <http://grants.nih.gov/grants/guide/pa-files/PA-14-149.html>
- Remember to determine your funding institute - NHLBI? NIAID? NCI? NIGHMS? And talk to the Institute's career development program officer who is listed on the institute's website.
- Instructions on "How to Apply" and the relevant forms are located online at <https://grants.nih.gov/grants/how-to-apply-application-guide.htm> (be sure to view the video entitled, "Using Our New Application Guide"). Although the information can be daunting, the NIH now has links to explain all the documents you need to submit. Ms. Shramo will be able to help you with this and also with budget preparation.
- HERE IS THE CONTENT YOU NEED TO FOCUS ON: Application forms specific to fellowship application (SF424 (R&R)- Forms Version E- revised December 7, 2018:

<https://grants.nih.gov/grants/how-to-apply-application-guide/forms-d/general/g.430-phs-fellowship-supplemental-form.htm#1>

TIPS FOR PREPARING GRANT APPLICATIONS:

In general the types of career development research grant applications you will be applying to require similar components though the actual title of the document, order and format may be different:

- 1) Your NIH Biosketch or resume
- 2) Your personal statement (of why you wish to pursue research training, your research experience and accomplishments if any, what you hope to learn)
- 3) Your mentor's NIH Biosketch and training records (this is something your mentor will already have or need to prepare)
- 4) Identify one or more important research Questions relevant to your project and the Gap in Knowledge you will fill by pursuing the intended work
- 5) A paragraph or more about the Significance of the research you plan to do
- 6) A hypothesis that explains your current thinking about the problem you are addressing
- 7) 2-3 Specific Aims (overarching integrated project goals)
- 8) A Research Plan (what you plan to do in each of the Aims)
- 9) Statistical Approach to analysis of the data (best to consult a statistician and solicit their help for this section)
- 10) References
- 11) Description of Training Environment: we have a paragraph you can edit as needed
- 12) Description of Training Plan: we have a template you can edit as needed for your grant
- 13) Make sure your research advisors review and edit your grant far in advance of the due date
- 14) Dr. Bumgardner can also review and edit your grant if given at least 3-4 weeks in advance of the due date.

Section XV. Appointment & Termination from NIH T32 Training Grants:

All T32 trainees are required to complete the following 3 on-line NIH Trainee forms:

- *Statement of Appointment*
- *Payback Agreement*
- *Termination Notice (TN)*

APPOINTMENT TO A T32:

Students appointed to Dr. Bumgardner's ARTIST T32 will work directly with the Research Training Program Manager. All other trainee postdocs will work directly with their PI/research mentor and their sponsored programs officer. The following steps must be taken to ensure timely appointment. Please also visit https://era.nih.gov/commons/faq_commons.cfm for eRA Commons FAQs.

- 1) Notify the Research Program Manager in writing (email is fine) that you have been awarded a T32.

- provide the name of the Grants Manager and their contact information;
 - name of the PI and contact information;
 - chartfield information, if known;
 - amount of annual stipend, if known;
 - start and end dates of award, if known
- 2) Trainees must set up a **Commons User ID**. This is an NIH electronic identification number specific to YOU as a trainee and later as a PI. **xTRAIN** is where the PI enters all of your information, your stipend, etc., and is the system by which forms are routed to you which you need to complete. Please check your emails frequently during the appointment process, so you are appointed expeditiously.

Trainees appointed to the ARTIST T32 will work with Barbara Shramo to set up their eRA Commons ID. Barbara's contact information follows. Trainees appointed to other T32s should consult with their PI for their SPOs contact information.

Barbara Shramo
 Sponsored Program Associate
 Office of Sponsored Programs
 1960 Kenny Road
 Columbus OH 43210
 614-292-1476
shramo.7@osu.edu

- 3) Trainees must also register for an **ORCID iD**. The ORCID iD is a persistent digital identifier that distinguishes you from every other researcher and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized. You may only register for the ORCID iD yourself, <https://orcid.org/register>. Please see section *Section XVIII. Presenting & Publishing Your Research* below for detailed information.

When received, please forward your Commons ID and ORCID to Anna so we may have on file.

- 4) Upon receipt of the above information, the Research Program Manager works directly with the Grants Manager and PI, and enters the HRA to appoint you to the T32.

TERMINATION FROM A T32:

Postdoc fellows who are terminating from a T32 will receive a *Termination Notice* from the NIH. The postdoc fellow will need to log into eRA Commons and click on the xTrain menu, locate the grant/trainee, and click the Process TN link. The system will take you to a Termination Notice Form where you will need to supply the following information. Please be aware that there is a 2,000 character limit, so we suggest you draft your responses first and then paste into the online form:

- Name
- Funding Source: (ex: ARTIST T32 Grant Number: 2T32AI 106704-06)
- Training Period:
- Project Title:
- Brief Summary of Training (training received and research undertaken during the fellowship or trainee tenure)
- Accomplishments:
 - o Selected Publications, if any, resulting from the research during the period;
 - o Scientific Presentations
 - o Awards - a list grants and career awards pending and received;

- Degree with anticipated graduation date
- If fellowship or training appointment is being terminated early, state reason.

If the Termination Notice is not completed prior to the specified deadline, the Termination Notice is routed to the PI. If the postdoc is appointed to Dr. Bumgardner's ARTIST T32, please supply the Program Manager and Dr. Bumgardner with a brief summary of the above information ASAP for pre-review. Samples are available.

Postdocs appointed to all other T32's will need to work directly with their PI and/or research mentor. Please also visit https://era.nih.gov/commons/faq_commons.cfm for eRA Commons FAQs.

PAYBACK REQUIREMENTS

- Postdoctoral Kirschstein-NRSA recipients will incur a payback obligation only during the initial 12 months of postdoctoral Kirschstein-NRSA support;
- Postdoctoral Kirschstein-NRSA recipients in the 13th or subsequent months of Kirschstein-NRSA support do not incur any additional payback obligation.

SERVICE REQUIREMENT

"In accepting a Ruth L. Kirschstein National Research Service Award to support my postdoctoral research training, I understand that my first 12 months of Kirschstein-NRSA support for postdoctoral research training carries with it a payback obligation. I hereby agree to engage in a month of health-related research, health-related research training, or health-related teaching for each month I receive Kirschstein-NRSA support for postdoctoral research training up to and including 12 months. If I receive Kirschstein-NRSA support for postdoctoral research training for more than 12 months, I agree that the 13th month and each subsequent month of Kirschstein-NRSA-supported postdoctoral research training will satisfy a month of my payback obligation incurred in the first 12 months. This service shall be initiated within 2 years after termination of Kirschstein-NRSA support. The research, teaching, and/or health-related activities shall be on a continuous basis and shall average at least 20 hours per week of a full work year. For information regarding deferral of the NRSA obligation due to participation in the NIH Loan Repayment Program see <https://www.lrp.nih.gov/>.

Under the new requirements, payback obligations stemming from postdoctoral Kirschstein-NRSA support may be discharged in the following ways:

- By receiving an equal period of postdoctoral Kirschstein-NRSA support beginning in the 13th month of such postdoctoral Kirschstein-NRSA support. *This means if you continue in a second year of research funded by the same or different NIH T32 you have met your payback requirements.*
- By engaging in an equal period of health-related research, research training, and/or health-related activities that averages at least 20 hours per week based on a full work year;
- By engaging in an equal period of health-related teaching that averages at least 20 hours per week based on a full work year.

Section XVI. Moonlighting

During their professional development and research training, housestaff are permitted to moonlight at most five (5) times per month at OSUWMC and/or Nationwide Children's Hospital provided the following conditions are met:

- Housestaff have the appropriate licensure;
- The housestaff/student's primary funding source permits supplementation of stipends, additional compensation, and multiple job appointments;
- The housestaff/student has discussed their interest in moonlighting with their research mentor and the mentor is in agreement;

- The frequency of Moonlighting is limited to five shifts per month AT MOST so as not to interfere with the student's research or classes, and to comply with NIH T32 expectations for those supported on a T32. The shifts per month may be reduced to less than five by the student's mentor depending on the project and the mentor's expectations;
- Moonlighting is only permitted for housestaff in good academic standing, and the permission to moonlight is at the discretion of the DOS Residency Program Director and the DOS Director of the Research Training Program.

Prior to beginning moonlighting, housestaff must obtain a full MD license through the State Medical Board of Ohio as well as a personal DEA through the Office of Diversion Control, Drug Enforcement Administration, U.S. Department of Justice. OSUWMC's moonlighting policy is located online at <https://onesource.osumc.edu/departments/GME/Documents/ResidentFellowMoonlightingPolicy.pdf>. Please take a moment to review. Housestaff will not be permitted to start moonlighting without having provided evidence of the appropriate licensure, personal DEA, and malpractice insurance.

Please also refer to *Section XIV. FUNDING FROM MULTIPLE SOURCES*. It is the student's responsibility to know and understand if they are eligible to participate in moonlighting.

Lori McGuire, Credentialing Specialist, is willing to assist you with your MD license applications. See the Program Manager, and she will put you in touch with her. The State Medical Board of Ohio's MD application, links to other required applications, and step-by-step instructions are located online at <http://www.med.ohio.gov/>:

- Step 1: Complete a Federation Credentials Verification Service (FCVS) packet;
- Step 2: Complete the Ohio Addendum & pay the Ohio Licensure Fee
- Step 3: Complete a criminal background check (FBI and Ohio BCI)
- Step 4: Request a Physician Profile

Background checks can be completed here at OSUWMC in ID Processing. The fee is approximately \$50.00, cash or check. You must provide ID Processing with the address/instructions from the SMBO at the time of the background check. Please notify the Program Manager when you plan on completing this requirement so she can complete and submit an additional form to ID Processing on your behalf.

PERSONAL DEA:

If you are moonlighting at OSUWMC/The James, then you are eligible for a fee waiver or fee exempt DEA. You may only use the Fee Exempt DEA Certificate while prescribing at OSUWMC/The James or at another institution representing OSUWMC. *If you are moonlighting at Nationwide Childrens, you are NOT eligible for the fee waiver or fee exempt DEA.*

The online application is located at <https://www.deadiversion.usdoj.gov/drugreg/index.html>. Select the link for "New Applications Online" – Select DEA Form 224.

Tips for completing the online application:

1. You will need to have your license to practice, which will include your prescriptive license (if applicable) issued by the Ohio Board of Nursing or the State Medical Board of Ohio **before** you can apply for your DEA Certificate.
2. Enter your General Information. Provide a **middle initial** for your name if applicable.
3. **Clinical Practice Address:** The Ohio State University Wexner Medical Center/The James Cancer Hospital, "Enter the clinical practice address and phone number"
4. **Mailing Address:** Enter your home address as the address for your DEA certificate to be mailed to you.
5. **DEA Schedules:** Be sure to request Schedules 2, 2N, 3, 3N, 4 and 5.

6. **Personal Information:** DO NOT enter a TAX ID number. You will enter your social security number
7. **Certification Institution:** The Ohio State University Wexner Medical Center/The James Cancer Hospital
8. **Certifying Official:** Andrew M. Thomas, MD, Chief Medical Officer
The Ohio State University Wexner Medical Center
614-293-0685
9. There is no refund if you have already paid for an existing DEA certificate

Your DEA certificate will be issued in approximately one week and takes another week to arrive at your home address. Please provide the Research Program Manager with a copy of your personal DEA when you receive.

DEA Certificate (Fee Paid): If you are/will be moonlighting at Nationwide Childrens, you are not eligible to apply for a fee exempt DEA and will be required to pay the fee to obtain your certificate.

Finally, a *Moonlighting Approval Form* will need to be signed you, Dr. Harzman, Dr. Bumgardner, and your mentor. Sign, obtain your mentor's signature, and return to the Research Program Manager. The Research Program Manager will obtain the remaining signatures.

In summary, the following must be on file before you will be permitted to moonlight:

- A copy of your full M.D. license;
- A copy of your personal DEA;
- Moonlighting Approval Form with all signatures;
- If moonlighting at Nationwide Children's, additional documentation must be on file:
 - o Personal malpractice insurance
 - o Call schedule

Section XVII. Conducting Research at The Ohio State University

OFFICE OF POSTDOCTORAL RESEARCH:

Current postdocs are highly encouraged to visit the College of Medicine's webpage, [Current Postdocs](#), for information concerning benefits, compensation & taxes; links to University, human resources, research and other policies that pertain to postdocs; links to various research and technology resources; links to funding & grants such as recent funding announcements and grant-writing tips; and miscellaneous things like upcoming events.

The Office of Postdoctoral Research provides summary information to assist postdocs, faculty advisors, and administrative staff. Detailed, official information about job titles, benefits, and compensation is available from the OSU Office of Human Resources (phone: (614) 292-1050; web: <http://hr.osu.edu/>).

While the postdoc office strives to provide accurate information, please note that benefits eligibility, aspects of particular benefits, and federal and university guidelines may change. Your unit's human resources professionals and the OSU Office of Human Resources are excellent resources for answering questions about human resource issues.

OFFICE OF RESEARCH – HUMAN SUBJECTS PROTECTION – CITI (Collaborative Institutional Training Initiative):

All investigators and key personnel who participate in the design, conduct, or reporting of human subjects research (including exempt research) must be appropriately trained in the protection of human subjects. Additional training in the responsible conduct of research and good clinical practices may

also be required by funding agencies and other research sponsors. **All RTP participants MUST complete CITI training at a minimum.** Please see [ORRP's Training Requirements](#) for CITI access instructions. Please also check with your research mentor/lab personnel for additional training requirements. Additional information regarding the CITI training requirement is located online through OSU's Office of Responsible Research Practices, <http://orrrp.osu.edu/irb/training-requirements/citi/>.

Animal Care & Use, Biohazards in Research, Funding Opportunities, Human Research Protections (including ORRP and IRB), compliance, policies, etc. are outlined on the Office of Research's web page, <http://research.osu.edu/>. Information concerning [Graduate Research](#), including funding opportunities, conducting research with human subjects, animals, and biohazards is located at <http://research.osu.edu/students/graduate/>.

OSU's POLICIES GOVERNING RESEARCH

<http://policies.osu.edu/>

- Human Research Protection Program Policy
- Institutional Animal Care & Use Review
- Records Management
- Research Data
- Research Misconduct
- Responsible Use of University Computing & Network Resources
- Other policies

UNIVERSITY LABORATORY ANIMAL RESOURCES (ULAR):

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. Please see <http://ular.osu.edu/training/required-training/> for specific information.

RDR i2b2 (OSU Research Data Repository):

The Ohio State University Research Data Repository (RDR) is an IRB-approved database populated with a coded-limited dataset sourced from OSU Wexner Medical Center Electronic Health Record via the Information Warehouse. Application level access to the RDR is implemented via the Informatics for Integrating Biology and the Bedside (i2b2) software product developed at the Partners Healthcare System which has been adopted by over 80 Academic Health Centers across the country.

The RDR provides OSU researchers the ability to perform self-service cohort discovery for research purposes in order to support hypothesis generation, feasibility analysis, and study population enrollment reports. The RDR is available for use by Ohio State biomedical research community members (faculty and staff) affiliated with the OSU Wexner Medical Center and/or one of the seven OSU health sciences colleges: Dentistry, Medicine, Nursing, Optometry, Pharmacy, Public Health, and Veterinary Medicine.

In order to gain access to this database, a 2-hour training session must be completed. A login and password will then be assigned to you. Please log in to BuckeyeLearn at [BuckeyeLearn](#) to register for a session. Under *Subjects*, click on *Applications and Software*, and scroll down and click on *OSU*

Research Data Repository (RDR) i2b2. Session details will be for each meeting date of the class, click on *Request* to schedule the meeting date of interest to you.

General RDR questions can be emailed to ccts-informatics@osumc.edu; the National i2b2 Consortium website is located at <https://www.i2b2.org/software>; OSU RDR i2b2 Website: <https://i2b2.osumc.edu/webclient/index.php>; request a project-specific RDR consult at <https://researchrecord.osu.edu> (Computerized Research Record (CoRR) available data fields are located online at [Research Data Repository \(RDR\) Available Data Fields](#)).

CENTER FOR CLINICAL & TRANSLATIONAL SCIENCE:

The Center for Clinical & Translational Research (<https://ccts.osu.edu/>) is funded by a multi-year Clinical and Translational Science Award from the National Institutes of Health and leverages the expertise from every college across the University including the College of Engineering, and OSUWMC, Nationwide Children's Hospital, and various community, business, and regional institutional partnerships. The CCTS provides financial, organizational, and educational support to biomedical researchers as well as opportunities for community members to participate in credible and valuable research.

Services provided include the [Resource Room](#) (information on biostatistics resources, Project Management for Research Toolkit, Tools of the Trade Archive, etc.), [Mentorship](#), [Research Education and Training Programs](#), [Career Development Program \(KL2\)](#), and the [Mentored Research Training Program \(TL1\)](#).

The [CCTS Research Concierge](#) (366-5212) can assist researchers with their projects by helping to navigate the research infrastructure, matching requests for specialized expertise with faculty, assessing research needs, making recommendations for services, and facilitating access to CCTS resources.

Section XVIII. Presenting & Publishing Your Research

Presenting your research provides you the student with experience in developing your science communication and oral presentation skills. During their professional development training, students are expected to present abstracts for consideration for presentation at the following events:

Columbus Surgical Society Annual Presidential Symposium: This event is typically held in February of each year. A number of our students have placed and won this prestigious local competition.

Department of Surgery's Annual Research Conference: This event is typically held in May in conjunction with the Department of Surgery's Zollinger Visiting Professorship, and is designed to bring students, residents, fellows, faculty and guests together to share and discuss results of research relevant to a variety of surgical disciplines. The DOS Research Training Program Manager organizes this event, and will email students with the abstract submission due date. Winners of this event receive a monetary award.

James D. King Award Research Award: The James D. King Research Award competition is usually held in July of each year. Students in their first year of professional development training will give a 10 minute presentation regarding their research project to the Graduate Studies Committee. The winner of the competition will receive a monetary award that can be applied toward travel to conferences and for educational materials.

OSUWMC Trainee Research Day: This event is held annually in April and is organized and sponsored by the COM. Research Day provides an opportunity for researchers in training at OSUWMC to present their biomedical research in a public forum and to compete for travel awards for outstanding work. The

group of students who present at this forum includes trainees at all levels of research training, including undergraduate, medical and MD/PhD students, graduate students as well as postdoctoral fellows and researchers and clinical residents and fellows. Trainee Research Day also presents an opportunity for colleagues and visitors to learn about the cutting edge research occurring at Ohio State. Faculty judges review poster presentations and make the final selections for the awards. Please visit <https://researchday.osu.edu/> for more information.

Students are also encouraged to submit their research to at least one national meeting. To assist you with this, the program maintains a “*National Meetings*” spreadsheet which is updated annually, and provides a list of some local, national, and international meetings by surgical specialty. Your mentor can offer suggestions as well.

ACKNOWLEDGING FUNDING SOURCES:

Please always acknowledge your funding support source on your abstracts, journal articles, posters, slide presentations, and future publications. *Acknowledging your funding sources is an NIH requirement.* This acknowledgement is tracked and reported to the NIH and is used as a key metric for the success and continued funding of grants. Your PI will be able to provide you with the appropriate language to use (it’s generally located in the *Notice of Award* or similar document).

Students who are supported by the **ARTIST T32** must use the following acknowledgment as stipulated by the NIAID (place an asterisk next to your name in the list of authors):

**Supported by the National Institute of Allergy and Infectious Diseases of the National Institutes of Health under Award Number T32AI106704 (Advanced Research Training in Immunology for Surgery Trainees). The research reported in this “abstract/poster/powerpoint/publication” and the content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.*

Students receiving a **TL1 award through the CCTS** must use the following language:

The project described was supported by Award Number Grant XXX (example: TL1TR001069, see your award letter or notice of appointment) from the National Center For Advancing Translational Sciences. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Center For Advancing Translational Science or the National Institutes of Health.

Possible alternative NIH funding acknowledgement for ARTIST or other OSU NIH T32 sources of funding (check with your PI regarding specific language to use):

“This research was supported by the National Institutes of Health under the Ruth L. Kirschstein National Research Service Award (grant type (T32), grant number) from the (name of NIH Institute or Center).”

Example of support acknowledgement for industry (place an asterisk next to your name in the list of authors):

**Supported by the Society of University Surgeons Karl Storz Resident Award.*

Additional information regarding acknowledging funding your funding source can be found online at <https://ccts.osu.edu/node/2593>.

NIH PUBLIC ACCESS POLICY: Guidance for reporting publications for Institutional Training, Career Development and Related Awards

The National Institutes of Health Public Access Policy is an open access mandate implemented in 2008 and requires that research papers describing research funded by the NIH must be available to the public for free through PubMed Central within 12 months of publication.

The NIH requires Principle Investigators to report any T32, or other activity code noted below, supported trainee publication which occurred during the trainee's training period. The association of the publication with the T32 does not imply that the research or the study was supported by the T32 but rather that an NIH supported T32 trainee contributed to and was a co-author on the paper and thus the publication is subject to open access policy.

While the research may have preceded your training period, the publication occurred during the training period. The topic of the research does not have to be the same as the research project which is the focus of your research training. This data speaks to the scholarly productivity of the T32 trainees.

- This guidance applies to the following activity codes: T15, T32, TL1, T34, TL4, T35, T90, R25, RL5, R90, RL9, K12, KM1, KL2, D43, D71, DP7, U2R, and U45.
- Trainee, scholar, and participant publications must be reported in section C.1 of the RPPR if:
 1. the publication was accepted for publication or published during the reporting period; and,
 2. the publication resulted from work conducted while the individual was supported by the award (i.e., receiving a stipend or salary from the award).

Helpful Links:

[Yale Guide: NIH Public Access Policy](#): The tab for Flow Chart & Tutorials contains a nice diagram and videos.

[My Bibliography FAQ](#): This page from the NIH Public Access Policy website provides some good information about how to associate awards with citations.

[OSU College of Medicine Office of Research](#): Information about the 4 different ways to associate grants with a publication, including screenshots of what it will look like when they search for your award in the My Bibliography system. The section on reporting publications in an NIH Progress Report also has information about how to report non-compliant publications. The below link has more information about this as well.

[My Bibliography: Public Access Compliance](#) – This brief YouTube video illustrates how to add grant information to citations associated with your My Bibliography. Linking your My NCBI account with your eRA Commons account first is required.

[My NCBI Help: My Bibliography](#) – This chapter from the My NCBI Help Manual has sections on how to manage compliance, including more details on how to associate funding with your publications.

[eRA For Grantees: Manage Publications](#) – This webpage includes some basic information and links on how to manage publications through the eRA system, including how to link your eRA Commons and My NCBI accounts and how to manage compliance with the NIH Public Access Policy.

[NIH Public Access Policy: Training and Communications](#) – This website provides links and training materials for a variety of resources related to the Public Access Policy. A more extensive My NCBI training video is available as well.

General Reminders:

- **Awardees are responsible for ensuring publications are deposited into the NIHMS upon acceptance for publication.**
- Authors can use the Applicability & Submission Method Wizard (<http://publicaccess.nih.gov/determine-applicability.htm>) to learn how to bring their publication into compliance and report it to NIH.
- Investigators, authors and delegates can track public access compliance in My Bibliography (<http://www.ncbi.nlm.nih.gov/myncbi/>). Program Directors/Principal Investigators may wish to track publications they do not author in the collection Other Citations (see the My Bibliography [FAQ](#) for more instructions). [Other Citations](#) is especially helpful for managing institutional training grants and complex awards.
- **NIH recommends investigators or their delegates check the public access compliance of all the papers directly arising from their award at least once a quarter.**

Section XIX. Travel for University Business

Due to budget constraints, travel funds are only available to DoS faculty, staff, and residents who are physically presenting research at conferences. Please contact the Program Manager, Anna Patterson, for details.

No travel plans should be made until after the trip is reviewed and approved by Dr. Harzman and the DoS Finance Manager.

The Department of Surgery supports its students and employees in their research endeavors and encourages them to submit abstracts for presentation at local, national, and international meetings and conferences. As a University employee you are required to complete an *Application for Leave Form* and to obtain a *Spend Authorization Number* prior to arranging or undertaking any travel. Please see the Program Manager for additional details and prior to making any arrangements.

Prior to requesting a Spend Authorization, please be aware of the following:

- In order to be good stewards of the money allotted to resident travel, residents are strongly encouraged to share hotel rooms when attending the same meeting. Please speak with the RTP Program Manager if you have concerns or need assistance in finding a roommate;
- The Spend Authorization request must go through a number of approval levels. Please start the SA number process as soon as you receive your abstract notification so we are sure to obtain the best rates for registration, flights, etc.;
- If a third-party payer is paying for part or all of the trip (travel award, for example), a Spend Authorization number and approved leave form are still required. Please provide the RTP Program Manager with all third-party payer information for attachment to the Spend Authorization request;
- Flights must be booked through the University's travel affiliate, Corporate Travel Planners. Contact information follows below.

Students whose **mentors are affiliated with the CCC** may be supported for research related travel through travel arrangements and funding (chartfield with the designated CCC Grants & Contracts Specialist and/or Fiscal Officer). The resident student should notify the DOS Research Training Program Manager if the CCC is covering full or partial travel expenses and whether the mentor and/or DOS have committed funds. This will facilitate the students travel arrangements, coordinated travel support between CCC, the DOS, and other entities.

The University's travel policy may be found online at https://busfin.osu.edu/sites/default/files/211_travel.pdf. Travel FAQs are located online at <https://busfin.osu.edu/travel-faq>. The University permits us to prepay hotel, airfare, and conference registration *provided vacation is not taken in conjunction with the trip and/or the traveler has or is not receiving direct reimbursement of expenses from a third party*. Please allow a minimum of 10 days for the prepay/purchase to be reviewed, approved, and processed. Please see the RTP Program Manager for details.

The University's designated travel agency for individual travel is Corporate Travel Planners (CTP), 855-784-9282. **A Spend Authorization number must be issued prior to booking travel.**

Flights MUST be booked using Corporate Travel Planners, the university's approved travel agency. Please first login into Concur and complete your online profile at <https://osutavel.osu.edu/etravel-system/>. After the flight is booked, CTP will email the confirmation of same to the email address specified in your online profile.

- Please forward a copy of your travel itinerary to the RTP Program Manager so she may attach to your reimbursement. The flight itinerary is also needed in order to calculate your meal per diem post trip.

*****Documenting Travel, Vacation, and Vacation in Conjunction with Travel*****

Students are expected to be mindful of the amount of time they are taking off to attend meetings and conferences, particularly when taking vacation in conjunction with travel, and to ensure that the travel does not interfere with their research activities or adversely affect their academic performance. Vacation taken in conjunction with travel must be clearly indicated on the *Application for Leave Form*.

Vacation time is at the discretion of the research mentor and Program Director. As a University employee you are required to complete an *Application for Leave Form* prior to taking vacation. Requests will be reviewed and approved on a case-by-case basis by the Program Director.

It is the student's responsibility to communicate approved vacation and travel time to their research mentor. A copy of the signed *Application for Leave Form* should be emailed to the research mentor for their records.

Part IV. Human Resources, Payroll and Taxes

Section XX. Employment and Human Resources

While enrolled in the M.S., M.P.H., Ph.D. or other graduate level degree granting program, students must maintain their *Clinical Instructor Housestaff* appointment (Job Code 3184). This allows the student to maintain their appointment with the medical center as well as their position within the general surgery residency training program so as to satisfy GME and ACGME requirements. Depending on their funding source, students may also hold a *Postdoctoral Fellow* appointment (Job Code 6500). The postdoctoral fellow appointment, is required for NIH supported trainees (T32, F32, diversity supplemental funds), and must be the primary appointment when both appointments are held. This is an important distinction to keep in mind as benefits eligibility is limited as outlined below.

Because clinical postdoctoral research trainees are also employees of the University, students must complete the OSU Wexner Medical Center's annual online HIPPA, Infection Control, and Computer Based Learning (CBL) modules as well as the annual PPD and flu shot or exemption. Students must also complete any required credentialing/reappointment paperwork. Students are emailed reminders to complete these requirements in a timely fashion. Failure to do so may result in termination of employment and dismissal from the general surgery residency training program as well as the degree program. Your Employee Compliance status may be checked online at <https://apps.osumc.edu/HR/Compliance/login.aspx?ReturnUrl=%2fHR%2fCompliance%2fdefault.aspx>.

BENEFITS ELIGIBILITY:

While in the *postdoctoral fellow* position, benefits eligibility is different since the individual is considered a trainee receiving a stipend and not a salaried employee. Postdoctoral fellows maintain their dental, medical, and vision insurance, and tuition assistance benefits. Additional information about the postdoctoral fellowship position can be found online at http://medicine.osu.edu/research_ed/postdoc/pages/index.aspx. No contributions will be made to STRS (retirement), flexible spending accounts, disability, or life insurance. The university's benefit eligibility chart is a useful tool for determining available benefits at a quick glance across all types of appointment classifications (employee groups). See <http://hr.osu.edu/benefits/> for details about particular categories of benefits.

COUNSELING & CONSULTATION SERVICES:

The Ohio State Employee Assistance Program (EAP) is the University's employee assistance program. EAP is a confidential counseling service for Ohio State Employees and their families who are experiencing some form of personal or work-related distress that can interfere with work performance. All EAP counselors are independently licensed behavioral health professionals with years of experience and a commitment to the university community. For more information on the EAP program and services, call 1-800-678-6265 or visit <https://osuhealthplan.com/eap> and type in username "buckeyes" to view expanded services.

OFFICE OF HUMAN RESOURCES:

Benefit information and eligibility, FSA (Flexible Spending Accounts, postdocs are ineligible for this benefit), information on life events, retirement, etc. can be found online at <http://hr.osu.edu/>, 292-1050. A list of Discount Programs (including but not limited to auto sales & service, computers & accessories, fitness centers & wellness programs, housing, various memberships, and discounts on products and services, is also located on the HR website under the *Benefits* tab.

ONESOURCE:

Employee Self-Service is located on OneSource, <https://onesource.osumc.edu>. Update your personal information, access OSU MyChart Health Information, view your immunization records, view your paycheck, add/update Direct Deposit, review/change your W-4 information, enroll/change your benefits, access CampusParc, etc.

Section XXI. Payroll & Taxes

Postdoctoral Fellows are trainees, not employees, who are pursuing specialized research training and experience to benefit their professional medical career development. Postdoctoral fellows receive a ***stipend*** (for living expenses) in contrast to employees who receive a salary as payment for services rendered. Postdoctoral fellows are supported by a true fellowship, as defined by the IRS, or a training grant that prohibits the postdoc from being in an employee-employer relationship with the university. Postdoctoral fellows do not perform a service in return for compensation. Examples of common postdoctoral fellowships include the NIH Kirschstein National Research Service Award (NRSA) Individual Postdoctoral Fellowships (F32s) and NRSA Institutional Research Training Grants (T32s) and certain other individual postdoctoral fellowships.

Per government guidelines, the university does not withhold taxes from the postdoctoral stipend received by postdoctoral fellows who are U.S. citizens or permanent residents (this applies to trainees receiving stipend support from T32s, TL1s, F32s, etc.). **U.S. citizens or permanent residents who hold the position of Postdoctoral Fellow are responsible for paying local, state, and federal estimated quarterly income tax as needed to meet their tax obligations.**

If you do not already have one, we strongly recommend working with a qualified accountant or attorney who specializes in tax law and who can assist you with filing your quarterly taxes. The OSU Employee Assistance Program (EAP) at 1-800-678-6269 or 614-292-4700 may be able to make referrals as well as your peers.

TAX RESOURCES FOR POSTDOCTORAL FELLOWS:

For additional information, please see and the College of Medicine's webpage, http://medicine.osu.edu/research_ed/postdoc/current_postdocs/pages/index.aspx. On the left side of the screen, click on *Benefits, Compensation, & Taxes* for additional information. Please also see *A Quick Guide to Postdoctoral Fellowships* which is updated annually by the program. Additional resources follow. Please be aware that information published online supersedes any written materials provided by the program.

Federal Tax Information www.irs.gov

- Tax Topic 355: Estimated Tax
- Publication 505: Tax Withholding & Estimated Tax
- Publication 970: Tax Benefits for Education
- Form 1040-ES: Estimated Tax for Individuals (instructions for calculating and submitting your estimated tax payments)

State of Ohio Department of Taxation www.tax.ohio.gov

- [Estimated Payments](#) (includes a link to form IT 1040ES)

City of Columbus www.columbustax.net

- (see Quarterly Statement of Estimated Tax instructions and form):
http://www.columbustax.net/taxforms.aspx?type=858&filter=all&id=5602&menu_id=462

OSU Office of the Controller <http://controller.osu.edu/pay/pay-tax.shtm>

- Basic tax information only. The OSU Office of the Controller does not provide tax advising or consultation services.

OSU Human Resources

- See <http://hr.osu.edu/benefits/Rates-Tax.pdf> regarding how the health care benefit may affect taxable income.

PAYROLL SERVICES:

<http://www.controller.osu.edu/pay/pay-home.shtm>

MULTIPLE APPOINTMENTS, SUPPLEMENTATION & ADDITIONAL COMPENSATION

As previously mentioned, resident students are required to maintain the Clinical Instructor Housestaff (CIH) position while in the Department of Surgery's Research Training Program (lab). Before accepting ANY additional appointments, supplement or additional compensation, travel award, etc., before signing ANY paperwork, please provide the Research Training Program Manager with a copy of the award letter and all details. She will review and discuss with you and the Program Director prior to proceeding with final acceptance and appointment in the OSU HR system, if applicable.

WITHHOLDING in summary:

- Income taxes are withheld on the Clinical Instructor Housestaff position;
- Income taxes are withheld on moonlighting;
- Income taxes are NOT withheld on the Postdoctoral Fellowship position for U.S. citizens or permanent residents. You are responsible for paying quarterly taxes on this stipend.
- Tuition over \$5,250 in a calendar year is considered taxable income (see the RTP Manager to discuss further)

Section XXII. Miscellaneous

ACADEMIC COACHING/TEST ACCOMMODATION

Counseling and Consultation Service (CCS) provides comprehensive mental health services to students to promote personal well-being and academic success. Resident students who are struggling with their academics, including ABSITE, may contact the Dennis Learning Center (DLC) to schedule an appointment with an Academic Coach (<https://dennislearningcenter.osu.edu/free-appointments/>, 614-688-4011). The Dennis is located within the Younkin Success Center, 1640 Neil Avenue, Room 250. Please have your student ID in hand when you arrive for your appointment.

Learning assistance provided by the DLC addresses:

- Academic motivation
- Time management
- Self-regulation strategies
- Test-preparation strategies
- Test-taking strategies
- Note-taking strategies
- Reading strategies

In order to receive test accommodation, students must be tested for a learning disability, ADHD, etc. Please work with the Research Training Program Manager to arrange.

Resident students who are stressed and/or anxious are encouraged to schedule an appointment with the Program Director and/or Research Training Program Manager as soon as possible as well as their PCP and/or psychiatrist.

BUCKEYE LEARN:

BuckeyeLearn is Ohio State's new employee professional learning and development platform. Employees will login using their name.#. The class of most interest to our resident students is the *RDR i2b2* (OSU Research Data Repository) class, <http://go.osu.edu/BuckeyeLearn>.

BUCK-ID:

Your BUCK-ID is your student ID and is used to access many Ohio State services including the University Library System, COTA Bus services, and the Recreational & Physical Activities Center (RPAC). Students can also add money to their BUCK-ID to use at local restaurants and stores. Information on how to obtain and use your BUCK-ID is located on the BUCK-ID website, <https://buckid.osu.edu/Default.asp>.

CABS and COTA:

The University runs Campus Transportation (CABS) bus service for those traveling around campus. CABS also services the residential areas on the South, East, and North ends of campus. This is a no-

cost service provided to University faculty, staff, students, and visitors. For more information regarding routes and schedules, please visit the Transportation and Traffic Management website at <http://ttm.osu.edu>.

Information regarding the City of Columbus Transportation (COTA) bus lines can be found at <http://www.cota.com/>. The Ohio State University offers a COTA Bus Access Payroll Deduction Program for faculty and staff. Under the program, faculty and staff can opt to have unlimited COTA bus access through a *pre-tax* deduction taken from their pay each month. Employees are responsible for starting and stopping this deduction via Employee Self Service. Please visit [BuckID](#) for more information concerning COTA Bus Access Payroll Deduction. You are required to show the COTA bus driver your BUCK-ID upon boarding, so don't forget to carry it with you if you will be riding the bus.

CITY OF COLUMBUS:

If you'd like to learn more about what the city of Columbus has to offer, check out the Experience Columbus website <http://www.experiencecolumbus.com/>. You'll find great information about the city, social activities, and cultural opportunities.

DISCOUNT TICKET (via the Ohio Union):

The Ohio Union offers lottery and discount tickets (d-tix) to Columbus-area shows, museums, concerts, sporting events, and more at an exclusive rate. Some general discount tickets are available only through a Lottery System, and those tickets are for Cedar Point, Zoombezi Bay, Hocking Hills Zipline, and Mad River Mountain. For more information, visit the <https://activities.osu.edu/programs/dtix>.

Ticket information for OSU sporting events (Women's basketball, Men's Ice Hockey, etc.), hours of operation, and internet sales can be found online at <http://www.ohiostatebuckeyes.com/tickets/>.

DISCOVER OHIO:

When you have a little extra time to get away from the city, take some time to explore Ohio. From Cleveland to Cincinnati, to the Hocking Hills, to Amish country we have a lot to offer you. Check out the [Discover Ohio](#) web site.

EMPLOYEE ASSISTANCE PROGRAM:

Ohio State is committed to being a healthy workplace, which includes benefit offerings to help you manage life's challenges. As a benefits-eligible Ohio State faculty/staff member, you have access to the *Ohio State Employee Assistance Program (EAP)* which offers tools and resources to help address complex issues that can be affecting your mental and emotional well-being. Various services are offered including legal, self-management, financial counseling, etc. Please phone 800-678-6265, 2-4700 or visit their website at <https://osuhealthplan.com/eap/> for more information. As always, the Program Director and Program Manager are available to meet with you.

FINDING YOUR WAY AROUND CAMPUS:

Columbus campus is quite large and it can be difficult to find your way around if you are new. Probably the most helpful and convenient aid for getting around campus is the OSU Mobile app. Just go to the Ohio State home page at <http://osu.edu> and scroll to the bottom of the page to find the icon for OSU Mobile. Download it for either Apple or Android. Apps can also be downloaded to take a virtual tour or to find parking! Ohio State's website also has a searchable campus map. Just type in the name of the building (e.g. Wiseman Hall), and you will be connected to the map showing the immediate area around the building. You can also download a printable PDF campus map from this page to take with you on your first day of class.

LIBRARIES:

Prior Health Sciences Library website, [Prior Health Sciences Library](#)
Ohio State University Library website, [OSU Main Library](#)

MEDICAL CENTER ID's:

Please report lost or stolen Medical Center ID's immediately to Hospital Security, (614)293-4452, located on the first floor of Rhodes Hall. Medical Center ID's may be replaced for a nominal charge.

MINDFULNESS LINKS:

- [Yoga with Adriene](#) - Adriene offers a series of free yoga videos on Youtube. Try the *30 Day Challenge*.

The following links are through the *Mindful Awareness Research Center (MARC)* within the *Jane & Terry Semel Institute for Neuroscience and Human Behavior at UCLA*. These meditations can be played directly from the website or downloaded to iTunes.

- Free guided meditations – <http://marc.ucla.edu/mindful-meditations>
- Free guided meditation podcasts at the Hammer Museum - <http://marc.ucla.edu/meditation-at-the-hammer>

RECREATIONAL & PHYSICAL ACTIVITY CENTER (RPAC):

The Department of Recreational Sports offers members of The Ohio State University community an extraordinary experience to live active and meaningful lives while on-campus. Programs and services range from group fitness, aquatics, adventure trips, climbing, intramural sports, massage therapy, personal training, disc golf, roller hockey and many other activities. Recreational Sports is enhanced by its award winning indoor and outdoor facilities, including five indoor locations and more than 90 acres of outdoor space.

Information concerning membership and facilities is located at <https://recsports.osu.edu/>. Faculty/Staff using the tuition benefit (fee waiver) for classes are eligible to purchase the student semester membership for \$123 (2019 – 2020 membership rate).

SECURITY/CAMPUS POLICE:

<http://www.ps.ohio-state.edu/> The Hospital's 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) are available in the evenings or at late night.

SOFTWARE FOR STUDENTS:

The Office of the Chief Information Officer (CIO) offers a variety of public domain, bulk purchase, and site-licensed software to the OSU community. Available software by platform: Windows, Mac OS X, UNIX/Linux/SUN, and others. Specifics, including system requirements, can be found online at <https://ocio.osu.edu/software>. IT Resources for students are located at <https://ocio.osu.edu/audience/students>. Students can access BuckeyeLink and BuckeyeMail from this webpage as well.

RefWorks: If you need software for creating & managing your references, and generating bibliographies, Ref Works is available through the Prior Health Sciences Library for free, <https://www.refworks.com/refworks2/default.aspx?r=authentication::init&groupcode=RWOHioSU>.

SURGERY RESIDENT RESEARCH ORGANIZATION:

This group is an official OSU student organization. Student organizations are entitled to organizational funds of \$2,000 per year the first year and \$3,000 for subsequent years to support its activities. The

purpose of this organization is for surgery residents in the lab/professional development year to have the opportunity to organize some educational and rewarding activities related to research and academic careers. Examples of potential activities include sponsorship of a Visiting Professor, a Surgery Career interest event for undergraduates, medical students and others, a surgery resident Peer Networking event, sponsorship of an event to enhance understanding of and access to NIH sponsored career development grants, sponsorship of an Outreach event or activity for local schools to learn about surgery and research, etc. Key elements to activating the student group each year are:

- 1) The new President needs to undergo training;
- 2) The treasurer needs to undergo training to learn proper use of funds;
- 3) Election of other officers.

TEXTBOOKS:

Textbooks can usually be purchased at the University Bookstore which partners with Barnes & Noble or SBX Student Book Exchange (SBX). The Barnes & Noble University Bookstore is located in the South Campus Gateway at the corner of High Street and East 11th Avenue, and SBX is located at 1806 N. High Street. SBX has also opened a store in the Ohio Union. You can search for your class on the Barnes and Noble web site to find books required for your classes <http://www.barnesandnoble.com/u/textbooks-college-textbooks/379002366/>. Books can sometimes be purchased or rented through online booksellers. The course syllabus will generally specify which bookstore you are to purchase books from or if books may be purchased online. Be sure you are using the correct edition.

WEXNER CENTER:

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. See <http://www.wexarts.org/> for additional information.

PLANNING STEPS & MILESTONES FOR A SUCCESSFUL RESEARCH TRAINING EXPERIENCE BY PGY LEVEL:

PGY1s:

- ✓ Attend the DOS Research Training Program Fall Information Meeting (PGY1s/PGY2s)
- ✓ Review DOS Research Training Program Orientation Meeting Materials
- ✓ Discuss interest and timing of professional development year with Dr. Harzman
- ✓ Meet with Dr. Bumgardner to discuss potential research directions and potential mentors
- ✓ Talk to PGY3-5s about potential projects and mentors
- ✓ Review the handbook tips on selection of a research mentor
- ✓ Meet with potential research mentors to determine available projects
- ✓ Select research mentor(s) or mentorship team
- ✓ Notify Dr. Bumgardner, Anna Patterson of research mentor, expected year to start professional development, anticipated # of years in research training
- ✓ Work with OSU grants administrator and research mentor to apply for a career development research grant based on the selected project (ideally this should be initiated 15 months in advance of PD year)
- ✓ Refer to research grant preparation resources to assist with grant preparation (DOS handbook, DOS Education website resources, surgery resident colleagues, NIH website, mentor lab/project manager etc.)

PGY2s/PGY3:

- ✓ Attend the DOS Research Training Program Fall Information Meeting
- ✓ Review DOS Research Training Program Orientation Meeting Materials
- ✓ Submit career development research grant to institutional OSU and NCH T32 deadlines (variable though often in the Spring), Pelotonia Fellowship program, NIH, surgical organizations (SUS etc.)
- ✓ Apply for NIH Loan Repayment Program (LRP)
- ✓ Request undergraduate and medical school transcripts
- ✓ Apply to OSU Graduate School (on-line)
- ✓ Attend DOS Research Training Program Course Enrollment Meeting (Spring meeting)
- ✓ Enroll in Classes on-time! Waive student health insurance. Pay fees and waivers.
- ✓ Prepare research project summary presentation for the James King Award meeting (Summer)

PGY2/PGY3s in the Research Training

& Professional Development Year:

- ✓ Finalize your Curriculum Plan and Curriculum Plan Approval Form
- ✓ Enroll in classes
- ✓ Review the DOS Research Training Program Handbook Meet with your research mentor to develop a timeline of milestones and a schedule of mentor meetings
- ✓ Complete and submit all program materials in a timely fashion
- ✓ Prepare DOS Trainee Research Progress Update Form (quarterly in preparation for the quarterly meeting)
- ✓ Attend DOS RTP Quarterly meetings
- ✓ Meet with Dr. Bumgardner every 6 months
- ✓ Prepare research abstracts for the DOS Annual Research Conference, COM Trainee Research Day, national meetings (Annual Surgical Congress, American College of Surgeons, surgical subspecialty society annual meetings...)
- ✓ Notify Program Manager of any unexpected absences ASAP and far in advance of any anticipated absences for vacation, scientific travel etc.
- ✓ Travel arrangements to scientific meetings completed in advance of the meeting and with DOS coordination (Anna P)
- ✓ Organize surgery research and career development events through OSU Surgery Resident Research Organization Initiate Graduate School "Application to Graduate Form"
- ✓ Schedule RTP culminating research presentation with Graduate Studies Committee
- ✓ Identify a DOS Career Advisory Committee and career milestones for PGY3-5 clinical years
- ✓ Present culminating research at DOS Grand Rounds Recruit PGY1/2 to continue your project if applicable

PGY4s/PGY5s

- ✓ Complete submission/revision of manuscripts
- ✓ Identify at least one annual professional meeting for research presentation
- ✓ Consider developing your own "education" library of interesting cases with case history, X-rays, pathology and intro photos
- ✓ Update CV/resume (send copy to Anna P for DOS resident file and database)
- ✓ Fellowship/job applications
- ✓ Obtain letters of recommendation
- ✓ Network: Consider asking OSU faculty to make phone calls on behalf of your application
- ✓ Mock Interviews