



The Graduate School

UNIVERSITY OF SOUTH CAROLINA

GRADUATE COUNCIL MINUTES

February 23, 2015

The Graduate Council met on Monday, February 23, 2015 at 2:00 P.M. in room 311 of the Byrnes Building.

Graduate Council members present: Dr. Stacy Fritz, Chair; Drs. Jennifer Arns, Matt Brown, Nancy Brown, Erik Drasgow, Minuette Floyd, Jerry Hilbish, Thomas Kramer, Julia Lopez-Robertson, DeAnne Messias, Caroline Nagel, Elena Osokina, Terrance Weik, Tracey Weldon-Stewart; Danielle Schoffman, GSA Representative

Graduate Council members absent: Dr. Alexander Beecroft, James Ritter, David Tedeschi, and Susan Yeargin

Graduate School Representatives: Dr. Jessica Elfenbein, Dr. Murray Mitchell, Dale Moore and Teresa Smith

Provost Office Representative: Dr. Kristia Finnigan

Guests: Geniese James, John Pinckney, and Jane Roberts

NOTE: *These minutes will become final on March 23, 2015, if not challenged.*

1. **Call to Order and Approval of Agenda** (Stacy Fritz, Chair)

Dr. Fritz called the meeting to order at 2:00 P.M.

2. **Approval of Minutes for the meeting on February 23, 2015.**

The minutes were reviewed electronically and approved by the Council. Minutes are on file at The Graduate School website at:

<http://app.gradschool.sc.edu/gradcouncil/minutes.asp>

3. **Report of the Chair** (Stacy Fritz)

No report

4. **Report of the Dean of The Graduate School** (Jessica Elfenbein for Lacy Ford)

Dr. Elfenbein reported that the Travel Grant program has been changed. In the coming academic year, there will be four rounds of applications. Each round will be open for one week. Preference will be given to students who have never received funding, and there is a maximum of two awards per student in any department. Over the last two years, The Graduate School has funded more than 560 students from 10 Colleges totaling \$300,000 in awards. The Graduate School would like to see applicants from the School of Music and

the School of Nursing as Travel Grants have not yet been awarded to students in these departments.

The first round of Graduate Civic Scholar applications has ended. There were 20 applicants from five different colleges in this first round. It is open to both masters and doctoral students.

5. Report of the Associate Dean/Secretary of the Graduate Council (Murray Mitchell)

Dr. Mitchell acknowledged the tragic loss of Dr. Raja Fayad, School of Public Health. He was a member on the Science, Math, Engineering, Health Sciences, and Related Professional Programs committee. An alternative committee member will be selected in the near future.

Dr. Mitchell shared feedback received from concerned faculty members during the campus shooting. Students, faculty and staff handled themselves well under the circumstances. The University's Counseling and Human Development department has done a great job providing counseling during the days and weeks following the incident.

USC's Division of Law Enforcement will present, "Responding to an Active Shooter." It will be held on April 1 from 9:45am to 11:45am at the Center for Teaching Excellence, Thomas Cooper Library, room L511. You can find more information about the seminar at http://www.sc.edu/cte/Spring2015/Responding_Active_Shooter_Session2.php. Please share this information with other faculty.

Additionally, Dr. Mitchell mentioned that he reviews "Requests for Academic Forgiveness." Academic Forgiveness is a mechanism in place for graduate students who have been out of school for at least two consecutive years to return to school. The reason for delaying matriculation is no longer an issue, and the student has the support of the department to return to the University. The reasons for delay range from personal tragedy to the need to care for an elderly or seriously ill family member. If there is an issue that warrants further consideration, the Grievances, Appeals and Petitions Committee can review the case.

Issues for the Academic Policy and Practices Committee are the Residency Requirement, Senior Privilege and Accelerated Program. These are mechanism in place to facilitate undergraduate students who are advanced performers to get started on graduate work. There is a need to reconcile the wording on these forms and in the Graduate Bulletin. What may be coming relative to students being able to complete AP credit while in high school which reduced the amount of time to complete the graduate degree, not by a full year, but it does shorten their load to be able to carry something more. Under the guidance of an undergraduate/graduate director in individual programs, specific students may have an opportunity to do more advanced work. A reconciliation of the language needs to be done as well as a review of the amount of credit hours that can be counted toward the degree. There is conflicting information published in several different places, and there is some policy-related content that will warrant review by Council.

An article published in a January/February Council of Graduate School's publication, identified an effort to change policy, in this state and in most other states, regarding budgeting for a graduate education. It states how we can assist legislators in understanding the needs of higher education to enhance the quality of the work we do.

The suggestion is that more data is necessary, but many budget and policy decisions are driven by human interest stories. It gets subsequent emotional votes. We have not done a good job of talking to citizens in South Carolina about graduate education and the value it has in South Carolina. The link to the Council home page and several interesting publications available for download are here: www.cgsnet.org.

A reference to current Department of Education proposed college rating framework. Although focused on undergraduate education, a similar model is likely to be forthcoming for graduate education: <http://www2.ed.gov/documents/college-affordability/framework-invitation-comment.pdf>.

6. Report of the Graduate Student Association Representative (Danielle Schoffman)

The GSA is preparing for Graduate Student Week, April 6 – 10. Information regarding a schedule of events for the week is published in the latest [GSA newsletter](#). Please see the newsletter as it lists lectures and other special events sponsored by the GSA.

The GSA is partnering with Student Government to provide information on open electronic resources and open access. We are trying to better inform students what happens to their electronic thesis or dissertation once submitted. We are also trying to develop the funds to help students publish in open access journals. Danielle will provide more details at the March meeting.

7. Report of the Academic Policy and Practices Committee (Julia Lopez-Robertson)

Dr. Mitchell provided a summary of results from Peer and Peer aspirant institutions regarding Residency Requirements. Also included in the summary are the proposed changes based on the charge to the Academic Policy and Practices Committee. There is also information from the results of a query to a listserv of the Council of Graduate Schools (CGS). The results indicate that 4 programs with no central requirements defer to each program to identify residency requirements. Four programs have two consecutive semesters or allow adaptations when programs would seek their own specific requirements. Three programs had no central requirement at all. If the student could attain the degree, then the residency requirement was met. One institution has a Residency Requirement of four semesters of full time enrollment, another's was a single semester or two summers of fulltime enrollment. One university requires continuous enrollment to degree completion which could be one hour a semester. In contrast, University of Georgia language states that a student must be continuously enrolled to degree completion. Another had no residency requirement at all, and the other university site was under construction as they were undertaking the same type of research regarding residency.

The current and proposed language is presented to Council. A description of the intent of the residency requirement is provided as well as three options. The most significant change would be to shift from three semesters and 18 hours to two consecutive semesters of full time enrollment where full time is 6 hours for a student on assistantship and nine hours for those students who do not have an assistantship. Two consecutive semesters could be Fall-Spring, Spring-Summer, Summer-Fall, etc. The language for a mechanism for establishing program residency begins on page 9. Guidance intended to be provided for programs that might seek options two or three, identify a program-specific alternative for a residency plan particular for online delivery. Option three was formulated

to deal with the circumstance of an individual student as opposed to reoccurring situations.

The language is intended to offer guidance to anyone trying to design a residency program. If you wonder, "What is my obligation as a mentor or dissertation director to design some sort of experience that meets the spirit of what residency is supposed to be?" Notions of disciplinary depth and breath, scholarly emersion, professional socialization, and professional practice were identified as the components that were supposed to be addressed in the spirit of a residency requirement. The options are to accommodate different circumstances. There may be more desirable ways to do this as doctoral degrees evolve. Not all doctoral programs lead to academic positions. There are a variety of career paths out there for folks, and so the notion of residency may evolve in that context.

Dr. Fritz stated that in this case, fulltime enrollment appears to be a surrogacy for residency. She then asked, if residency refers to location, and if the student should be located close enough to the institution to physically attend.

Dr. Mitchell responded that the location issue can be addressed when students are fulltime enrolled. Those conditions are met when a student is fulltime enrolled. It is possible for a student to be distance education enrolled and take six hours. However, if enrolled in distance education they are not a graduate assistant. Six hours would not be considered fulltime and not meet the residency requirement as written. This would fall under option 2, if not option 3, to propose an alternative way of emersion in the discipline.

Dr. Hilbish asked if the term 'graduate assistant' included research assistants. Dr. Mitchell responded that it does include teaching assistant, research assistants, instructional assistants, and program assistants.

The language for the Residency Requirement is borrowed heavily from Virginia Tech. Permission will be sought if Council decides to use this language.

Dr. Elfenbein asked about residency and enrollment because USC has many students who are not continuously enrolled, they have not enrolled in Z-Status, they all but disappear, and then reappear when they are getting close to graduating. Dr. Mitchell responded to Dr. Elfenbein to suggest that Doctoral students who will finish within a ten year timespan are unlikely to do so without meeting the residency guideline as specified.

Dr. Mitchell mentioned that currently, students who are not enrolled for at least one major semester must fill out an update form. Dale Moore clarified that the update form is used by students who, unless the departments have very specific rules on what continuous enrollment is, the definition used by the Graduate School was, if you are not enrolled for one year, then you must update before you can continue. However, the Banner system changed that, and now enrollment must be established every major semester. In that respect, it is fair to say that the update form guarantees future enrollment unless the department has a different continuous enrollment definition. However, a student must be unenrolled for three years before the student must reapply. The Banner system shows whether a student has been continuously enrolled.

Danielle Schoffman mentioned that the financial implications of continuous enrollment during the time of dissertation preparation could be a hardship for some students.

Dr. Mitchell mentioned that individual programs can be more demanding in setting residency requirements.

Dr. Drasgow thought that the Graduate School set the residency requirement policy. Dr. Mitchell stated that the Graduate School's policy is that a doctoral student must complete their degree within 10 years.

Dr. Fritz referred to a section of the Graduate Directors handbook that states that any student using University resources, such as the Library, to complete their dissertation should be enrolled. Dr. Mitchell mentioned that this can be monitored when students graduate. When a student applies for graduation, we can notify the student that they must be enrolled the semester they plan to graduate.

Dr. Elfenbein mentioned a concern that offering an exception as in option three, might generate too much demand, and questioned whether it should be removed.

Dr. Nancy Brown suggested having only options one and two, but add a statement that any exceptions to these options will have to be approved.

After a discussion, Dr. Fritz presented the recommendation before Graduate Council for a vote. The recommendation is to accept the Residency Requirement language from Virginia Tech as a mechanism for establishing program residency requirements with an editorial change to delete option 3. The Graduate Council voted to unanimously accept the recommendation to be presented to Senior Vice Provost and Dean of Graduate Studies, Dr. Lacy Ford, for consideration. The revised proposal is attached at the end of these minutes.

8. Report of the Committee on 500/600 Level Courses, Distance Education and Special Courses (Murray Mitchell)

A listing of 500/600 Level Courses was presented to Council. The list was presented to the Council for informational purposes only.

Course Change Proposal

[COMD 526 Disorders of Articulation: Evaluation and Therapy](#) (3)

Change prerequisites

Current: COMD 507 or equivalent

Proposed: COMD 501 and COMD 507 or equivalent

[Effective Fall 2016]

Course Change Proposal and Bulletin Change

[MUSC 582 Introduction to the Music Economics](#) (3)

Title change

Current: Introduction to the Music Economics/(ies)

Proposed: Music and Money

[Effective: Fall 2016]

9. **Associate Graduate Faculty Nominations** (Murray Mitchell)

Name: None
Program:
Term:

10. **Fellowships and Scholarships Committee** (Caroline Nagel)

The Committee has its second meeting today to discuss Presidential Fellows and Trustee Fellowships. There are 20 Presidential Fellow applicants to review, and so far two students have accepted the Fellowship with three declines. An update will be given on the Trustee Fellowships at the next meeting.

11. **Report of the Science, Math, and Related Professional Program Committee** (DeAnne Messias)

Course Change Proposal/Bulletin Change
[STAT 702 Introduction to Statistical Theory I](#) (3)
Current: Prerequisite MATH 241
Proposed: Prerequisite
MATH 142 [Effective: Fall
2016]

APPROVED

Academic Program Actions/Bulletin Change
[Information Assurance and Security Certificate](#) (18)

APPROVED

Current: The graduate certificate program in information assurance and security requires ~~at least 18 hours~~ of graduate study, at least half of which must be courses at the 700 level or above with the CSCE designator, completed within a period of six years before the award of the certificate.

The ~~18 hours~~ must include ~~three~~ core courses.

- CSCE 522 – Information Security Principles
- CSCE 715 – Network Systems Security
- ~~CSCE 727 – Information Warfare~~

Proposed: The graduate certificate program in information assurance and security requires 12 hours of graduate study, at least half of which must be courses at the 700 level or above with the CSCE designator, completed within a period of six years before the award of the certificate.

The 12 hours must include two core courses.

- CSCE 522 – Information Security Principles
- CSCE 715 – Network Systems Security

[Effective: Fall 2016]

Course Change Proposal/Bulletin Change
[GEOL 800 Seminar – General Geology](#) (1-3)

APPROVED

Current: 1-3 hours

Proposed: 0-1 hours

Required of all graduate students.

No specified limit for enrolling for 0 credits, 14 times for 1 credit hour. Note: Pass-fail grading

[Effective: Spring 2016]

12. Report of the Humanities, Social Sciences, Education, and Related Professional Programs Committee (Matt Brown)

Course Change Proposal/Bulletin Change **APPROVED**
[PSYC 714 Psychoeducational Assessment of Children I](#) (3)
Current: 3 credits
Proposed: 1-3 credits
[Effective: Fall 2015]

Course Change Proposal/Bulletin Change **APPROVED**
[PSYC 715 Psychoeducational Assessment of Children II](#) (3)
Current: 3 credits
Proposed: 1-3 credits
[Effective: Fall 2015]

Course Change Proposal/Bulletin Change **APPROVED**
[PSYC 716 Selected Topics in Psychoeducational Evaluation](#) (3)
Current: 3 credits
Proposed: 1-3 credits
[Effective: Fall 2015]

Course Change Proposal/Bulletin Change **APPROVED**
[PSYC 832B Practicum in School Psychology](#) (3)
Current: 3 credits
Proposed: 1-3 credits
[Effective: Fall 2015]

Course Change Proposal/Bulletin Change **APPROVED**
[PSYC 832C Practicum in School Psychology](#) (3)
Current: 3 credits
Proposed: 1-3 credits
[Effective: Fall 2015]

13. Report of the Grievances, Appeals and Petitions Committee (Erik Drasgow)

No report

14. Other Committee Reports

No report

15. Old Business

No report

16. New Business

Dr. Finnigan and Geniese James presented an overview of the new electronic Academic Programs Proposal System to Graduate Council. The link to where these forms can be accessed is here: <http://www.sc.edu/programproposal/>.

17. Good of the Order

18. Adjournment

The meeting adjourned at 3:25 P.M.

Murray Mitchell, Secretary

cc:

President Harris Pastides

Senior Vice Provost and Dean of Graduate Studies Lacy Ford

Provost Michael Amiridis

Deans

Department Chairs

Graduate Directors

Aaron Marterer, University Registrar

Jodie Morris, Office of the Registrar

Andrew Graves, Office of the Registrar

Nancy Floyd, Office of Institutional Assessment and Compliance

**Report of the Academic Policy and Practices Committee
Graduate Council Meeting February 23, 2015**

Attached are four items for consideration by the Graduate Council in regard to a Residency Requirement for Doctoral Programs.

1. The original charge to the committee.
2. A summary of results from peer and peer aspirant institutions.
3. A proposal for a change to the Graduate Bulletin.
4. A proposal for an addition to the Handbook for Graduate Directors.

Brief Background

There is a “residency requirement” for students engaged in pursuit of a doctoral degree at The University of South Carolina (reproduced below). The emergence of online degree programs and distance education are just two artifacts with a potential impact on higher education. It is, therefore, timely to revisit the extent to which there is a continued need for having a residency requirements for graduate degrees at this institution.

Charge to The Academic Policy and Practices Committee:

Examine the current statement of a residency requirement and offer recommendations for consideration by the Graduate Council and in pursuit of a recommendation to the Dean of Graduate Studies regarding residency requirements for doctoral degrees at The University of South Carolina.

Specifically:

1. Compare to residency requirements at peer and peer aspirant institutions.
2. Solicit input from the Council of Graduate Schools for policy and current requirements at member institutions.
3. Identify and solicit input from other constituents likely to be impacted by a policy regarding a residency requirement.
4. Summarize results of these inquiries and draft a recommendation for the Graduate Council to consider.

Residency Requirement (Current Graduate Bulletin Statement)

The intent of a residency requirement is to ensure that doctoral students benefit from and contribute to the full spectrum of educational and professional opportunities provided by the graduate faculty of a research university. When establishing residency, the student should interact with faculty and peers by regularly attending courses, conferences, and seminars and using the library, library services, and other resources that support excellence in graduate education.

After admission to the doctoral program, the doctoral residency requirement is satisfied with 18 hours of course work taken in 3 consecutive major semesters. Enrollment in a summer term is not required to maintain continuity, but credits earned during summer terms (including May Session) will count toward the 18 hours required for residency.

Each graduate program may establish residency requirements that exceed these minimum standards. In doing so, the program may exclude certain courses and credit hours from meeting the residency requirement. The student's advisory committee certifies on the doctoral program of study ([D-POS](#)) form the term dates and the courses that satisfy the student's residency requirement.

Results of a search for Residency Requirements from other Institutions

A total of 16 program variations were consulted:

- Peer: Kentucky, Tennessee, Georgia, Connecticut and Rutgers.
- Peer Aspirant: Chapel Hill, Virginia, Maryland, Indiana and Missouri.
- CGS Listserv queries and a recommended program variation

Summary of Results:

- 4 programs have no central requirement; only program specific requirements.
- 4 programs have a requirement for 2 consecutive semesters, or, program specific requirements.
- 3 programs have no central requirement; they consider degree completion to be sufficient.
- 1 program has a requirement for 4 semesters of full time enrollment.
- 1 program has requirement for a single semester or 2 summers of full time enrollment.
- 1 program requires continuous enrollment to degree completion.
- 1 program has no residency requirement at all.
- 1 program is "under construction" as this issue is revisited.

Current Wording

Source: Graduate Bulletin:

[http://bulletin.sc.edu/content.php?catoid=72&navoid=8177#Residency Requirement](http://bulletin.sc.edu/content.php?catoid=72&navoid=8177#Residency_Requirement)

Residency Requirement

The intent of a residency requirement is to ensure that doctoral students benefit from and contribute to the full spectrum of educational and professional opportunities provided by the graduate faculty of a research university. When establishing residency, the student should interact with faculty and peers by regularly attending courses, conferences, and seminars and using the library, library services, and other resources that support excellence in graduate education.

After admission to the doctoral program, the doctoral residency requirement is satisfied with 18 hours of course work taken in 3 consecutive major semesters. Enrollment in a summer term is not required to maintain continuity, but credits earned during summer terms (including May Session) will count toward the 18 hours required for residency.

Each graduate program may establish residency requirements that exceed these minimum standards. In doing so, the program may exclude certain courses and credit hours from meeting the residency requirement. The student's advisory committee certifies on the doctoral program of study ([D-POS](#)) form the term dates and the courses that satisfy the student's residency requirement.

Proposed Change

Residency Requirement

The intent of a residency requirement is to ensure that doctoral students benefit from and contribute to the full spectrum of educational and professional opportunities provided by working closely with the graduate faculty and other students of a research university. ~~When establishing residency, the student should interact with faculty and peers by regularly attending courses, conferences, and seminars and using the library, library services, and other resources that support excellence in graduate education.~~ The membership of the Graduate Faculty of The University of South Carolina subscribe to the position that a residency requirement may be met in a variety of ways, and that these ways may relate to the particulars of different degree programs.

~~After admission to the doctoral program, the doctoral residency requirement is satisfied with 18 hours of course work taken in 3 consecutive major semesters. Enrollment in a summer term is not required to maintain continuity, but credits earned during summer terms (including May Session) will count toward the 18 hours required for residency.~~

All graduate programs are expected to encourage, design, provide and monitor the means for doctoral students to acquire the knowledge, skills, attitudes and values appropriate to their discipline through mechanisms that extend beyond mere course work. Regular attendance in courses to gain experience with specialized equipment and other scholarly materials and at seminars presented by scholars at The University of South Carolina and other invited guests is a beginning point. Additional experiences may include, but not be limited to, attending and presenting at professional conferences, participation in scholarly presentations of scholarly work, assisting with the conceptualization, and development and application for funding of scholarly efforts.

Given the diversity of disciplinary traditions at a major research university, residency requirements may be met in different ways. At The University of South Carolina, residency requirements may be met in one of two ways:

Option 1. Two consecutive semesters of full-time enrollment. Full time enrollment is defined as enrollment for 6 hours for students serving as graduate assistants and 9 hours for students who are not graduate assistants; consecutive semesters could be fall/spring, spring/summer, summer/fall, or spring/fall. Programs are expected to provide enrichment opportunities beyond course enrollment to help doctoral students understand and meet the intention of the residency requirement.

Option 2. Program-specific alternative residency plan. Diverse academic traditions and rapidly changing technology are factors that make a single approach to meeting the intention of a residency requirement problematic. Hence, program representatives may propose alternative methods to achieving the residency goals. This proposal would be submitted to the associate dean of The Graduate School for consideration by The Graduate Council.

Each graduate program may establish residency requirements that exceed these minimum standards. In doing so, the program may exclude certain courses and credit hours from meeting the residency requirement. The student's advisory committee certifies on the doctoral program of study ([D-POS](#)) form the term dates and the courses or other means by which the student satisfies the ~~that satisfy the student's~~ residency requirement. In the event that unique circumstances arise, it may be possible for a student to meet the residency requirement through an individualized plan. A proposal for an individual residency plan can be submitted to the associate dean of The Graduate School for consideration and action.

Additional Information to be included in the Graduate Director's Manual

Residency Requirement For Doctoral Students

The intent of a residency requirement is to ensure that doctoral students benefit from and contribute to the full spectrum of educational and professional opportunities provided by working closely with the graduate faculty and other students of a research university. The members of the Graduate Faculty at The University of South Carolina subscribe to the position that a residency requirement may be met in a variety of appropriate ways for different degree programs.

All graduate programs are expected to encourage, design, provide and monitor the means for doctoral students to acquire the knowledge, skills, attitudes and values appropriate to their discipline through mechanisms that extend beyond mere course work. Regular attendance in courses to gain experience with specialized equipment and other scholarly materials and at seminars presented by scholars at The University of South Carolina and other invited guests is a beginning point. Additional experiences may include, but not be limited to, attending and presenting at professional conferences, participation in scholarly presentations of scholarly work, assisting with the conceptualization, and development and application for funding of scholarly efforts.

Given the diversity of disciplinary traditions at a major research university, residency requirements may be met in different ways. At The University of South Carolina, residency requirements may be met in one of two ways:

Option 1. Two consecutive semesters of full-time enrollment. Full time enrollment is defined as enrollment for 6 hours for students serving as graduate assistants and 9 hours for students who are not graduate assistants; consecutive semesters could be fall/spring, spring/summer, summer/fall, or spring/fall. Programs are expected to provide enrichment opportunities beyond course enrollment to help doctoral students understand and meet the intention of the residency requirement.

Option 2. Program-specific alternative residency plan. Diverse academic traditions and rapidly changing technology are factors that make a single approach to meeting the intention of a residency requirement potentially problematic. Hence, program representatives may propose alternative methods to achieving the residency goals. This proposal would be submitted to the associate dean of The Graduate School for consideration by The Graduate Council.

The student's advisory committee certifies on the doctoral program of study (**D-POS**) form the term dates and courses or other means by which the student satisfies the residency requirement. In the event that unique circumstances arise, it may be possible for a student to meet the residency requirement through an individualized plan. A proposal for an individual residency plan can be submitted to the associate dean of The Graduate School for consideration and action.

Mechanism for Establishing a Program Residency Requirement

Proposals for an alternative residency plans (option 2 above) should be submitted to the associate dean of The Graduate School. Program-specific alternative residency plans will be presented to the Graduate Council for action. Proposals should be submitted by the academic unit at least one semester before the desired effective date for implementation.

Individual alternative residency plans will be acted upon by the associate dean of The Graduate School who will seek guidance from the Grievances, Appeals and Petitions Committee on an "as needed" basis. Proposals must be submitted by the student and faculty advisor/committee as appropriate, as early as possible or no later than concurrent with submission of the program of study.

Proposals must include a description of how this alternative proposal will address (a) Disciplinary depth and breadth; (b) Scholarly immersion; (c) Professional socialization; and (d) Professional practice.

Disciplinary Depth and Breadth

- Access to a wide variety of classes and academic experiences in the student's field and in related disciplines
- Access to library, information technology, and laboratory resources
- Quality and rigor of the program through involvement with and scrutiny by peers in other disciplines

Scholarly Immersion

- Development of the student's capacity to make significant original contributions to knowledge in a context of freedom of inquiry and expression (e.g., individual and group research training, assisting with developing applications for external funding, participation at scholarly conferences, publications or other forms of scholarly dissemination).
- Ability to understand and critically evaluate the literature of the field and to apply appropriate principles and procedures to the recognition, evaluation, interpretation and understanding of issues and problems at the frontiers of knowledge.

Professional Socialization

- Substantial interaction with a large pool of faculty to obtain scholarly and disciplinary advice, perspective, and guidance
- Interaction with fellow graduate students on professional issues
- Provision of a broad range of professional development experiences to guard against over-specialization
- Access to a wide spectrum of seminars, professional presentations, and contact with leaders in their own discipline as well as others

Professional Practice

- Awareness of and commitment to the ethical and regulatory principles and practices appropriate to the field.