TEXAS TECH UNIVERISTY

HEALTH SCIENCES CENTER

Graduate School of Biomedical Sciences

Guidelines and Requirements for Graduate Students Translational Neuroscience and Pharmacology (TNP)

I. Program of Study

The Translational Neuroscience and Pharmacology (TNP) concentration offers a a Doctoral (PhD) degree in Biomedical Sciences. At the time of admission into the PhD program, all students are subject to the requirements listed in the Texas Tech University Health Sciences Center Student Handbook (Code of Professional and Academic Conduct), the Graduate School of Biomedical Sciences Catalog, as well as the guidelines given below.

II. Program

- A. Prerequisites for Admission into the TNP Concentration:
 - All students admitted into the GSBS PhD program are considered "Undeclared" and are required to take all the GSBS Core Curriculum courses in the Fall and complete all GSBS IPE requirements (https://www.ttuhsc.edu/interprofessional-education/core curriculum.aspx)
 - All Undeclared students are required to complete three lab rotations prior to declaring a concentration and choosing a lab.

B. Program Curriculum

- Program Curriculum For more in depth description of the courses, please see the GSBS
 Catalog https://app4.ttuhsc.edu/CourseCatalog/default/Graduate-School-of-Biomedical-Sciences/2020%20-%202021/PhD-in-Biomedical-Sciences
- A minimum of 72 hours (48 Didactic, 12 Research, and 12 Dissertation) of graduate work are required for the PhD including:
 - Core courses I(GSBS 5471) Core II (GSBS 5372), Core III, (GSBS 5373), Core IV (GSBS 5174), Core V (GSBS 5275)
 - Lab Rotations (GSBS 5098)
 - Responsible Conduct of Research (GSBS 5101)
 - Principles of Translational Neuroscience and Pharmacology (GTNP 5303)
 - Human Physiology (GMBP 5302)
 - Intro to Biostatistics (GSPH 5311)
 - Research (GTNP 7000), Seminar (GTNP 7101) and Readings (GTNP 7102) for every Fall and Spring semester except Year 2 Fall Semester and the semester in which they complete their defense
 - Dissertation (GTNP 8000).
- Per GSBS requirements, all TNP students must have published an original peer-reviewed first
 author research publication prior to scheduling their defense. The manuscript must be in a peerreviewed journal that is indexed by PubMed or Web of Science. Please see the GSBS Catalog
 for any exceptions to this policy.

Required Courses

| Course Number | Course Name | Credit Hours |
|---------------|-----------------------------|--------------|
| GSBS 5471 | Core I: Molecules | 4 |
| GSBS 5372 | Core II: Cells | 3 |
| GSBS 5373 | Core III: Genes | 3 |
| GSBS 5174 | Core IV: Biomedical Seminar | 1 |
| GSBS 5274 | Core V: Laboratory Methods | 2 |
| | | 13 |
| | Total | |

| Course Number | Course Name | Credit Hours |
|---------------|-----------------------------------|--------------|
| GSBS 5098 | Techniques in Biomedical Research | 6 |
| GTNP 5303 | Principles of Translational | 3 |
| | Neuroscience | |
| GMBP 5302 | Human Physiology | 3 |
| GTNP 7101 | Seminar | 1 |
| GTNP 7102 | Readings | 1 |
| GSBS 5101 | Responsible Conduct of Research | 1 |
| | Total | 15 |
| | | |

| Course Number | Course Name | | Credit Hours |
|---------------|-------------|-------|--------------|
| GTNP 7000 | Research | | 9 |
| | | | |
| | | Total | 9 |

| Course Number | Course Name | | Credit Hours |
|---------------|-------------|----|--------------|
| | Seminar | | 1 |
| | Research | | 8 |
| | Total | al | 9 |

| Course Number | Course Name | Credit Hours | |
|---------------|-------------------------|--------------|----|
| GTNP 5303 | Medical Pharmacology | | 3 |
| GIDN 5910 | Integrated Neuroscience | | 9 |
| | | Total | 12 |

C. Major Advisor and Advisory Committee

• In accordance to GSBS Policy and TNP policy the PhD Advisory Committee shall be composed of at least five graduate faculty members, with at least three members from the TNP concentration and two of the members from outside the concentration.

- The graduate advisor will meet with all TNP students once a year to monitor student progress and identify any problems within the concentration.
- Student committee meetings are mandatory and will be required at least once a year, without excuse. Scheduling is the responsibility of the student and the mentor.
- Committee meeting minutes will be detailed. Minutes will specifically note any problems and demands made by the committee and/or mentor along with a timeline for addressing these issues. Minutes must be filed with both the GSBS office and the TNP Department. Problems with students or their progress are expected to be documented in detail in the committee meeting minutes. Problems that cannot be resolved by the student, mentor and committee, will be resolved by a special meeting between the student, mentor, committee, graduate advisor and departmental chair.

D. Assessment Student Progress

- The student's mentor and advisory committee are responsible for overseeing the student's progress. They will make the most substantive contributions to, and the most important decisions regarding the student's academic career. The committee membership must include at least three TNP members and two members of other concentrations, or qualified individuals from TTU. Faculty members at other institutions may be members with the permission of both the mentor and the graduate advisor.
- Every year the student and their mentor(s) will meet with the GSBS Student Affairs Advocate to discuss student status and to address any questions or concerns the student may have.

E. Qualifying Exam

For the detailed Qualifying Exam time line, please see the GSBS Course Catalog (on website located under "Doctoral Degree" section; on page 23 of 79 in the Full Catalog PDF version). https://app4.ttuhsc.edu/CourseCatalog/default/Graduate-School-of-Biomedical-Sciences/2020%20-%202021/General-Policies

- The purpose of the Qualifying Examination is to ensure that students have mastered the fundamentals in a major area of interest, and they are adequately prepared to begin working full-time on doctoral research. The following policies and procedures apply to ALL current Biomedical Sciences Ph.D. students, regardless of which concentration they have chosen.
- A student is eligible to stand for this examination after receiving approval of the doctoral degree plan from the GSBS Office and completing most of the course work prescribed by the approved plan. Students may take the Qualifying Examination as soon as they have completed core coursework, however, *it must be completed by the end of the third year*.
- The Qualifying Exam shall be written in the NIH F30 (MD/PhD)/F31 (PhD) format with a complete application, including all of the forms (abstract, specific aims, research plan, biosketch, training plan, etc.)
- The oral exam should be presented as a typical public seminar (40-45 minutes) followed by an open Q&A discussion that will not exceed 15 minutes. This presentation will be followed by a closed-door committee examination.
- With the consent of the mentor and the student, the Advisory Committee will serve as the Qualifying Examination committee, with the exception that the Chair of the Committee will be elected by the committee members. The mentor is ineligible to be the Chair. The Examination Committee votes (pass/fail) on both the written and oral exam components. If a student receives more than one negative vote for one component, this will constitute failure of the respective exam component. The student may repeat each component only once.

7. Completion of the degree program:

- The TNP concentration will follow all GSBS policies and procedures. Additional details on the following are available in the GSBS catalog: https://app4.ttuhsc.edu/CourseCatalog/default/Graduate-School-of-Biomedical-Sciences/2020%20-%202021/General-Policies
- In addition to the GSBS grade policy, the concentration reserves the right to terminate any student that receives a failing grade in any course.

Graduate Faculty of the Program

Graduate Advisor: Michael P. Blanton, Ph.D.

| Full Membership |
|----------------------------------|
| Avila, Mirla, M.D. |
| Benamar, Khalid, Ph.D. |
| Blanton, Michael, P., Ph.D. |
| Guindon, Josee, Ph.D. |
| Henderson, George, Ph.D. |
| Lawrence, J. Josh, Ph.D. |
| Neugebauer, Volker, M.D., Ph.D. |
| Ponomarev, Igor, Ph.D. |
| Popp, Roseanna Lisa, Ph.D. |
| Tenner, Jr, Thomas, Ph.D. |
| Young, Alice M., Ph.D. |
| |
| Associate Membership |
| Artigas, Pablo, Ph.D. |
| Bergeson, Susan, Ph.D. |
| Cornwal, Gail Ph.D. |
| Cuello, Luis, Ph.D. |
| Culberson, John W., Md, MS |
| Ganapathy, Vadivel, Ph.D. |
| Jansen, Michaela, Ph.D. |
| Kang, Min, Pharm.D. |
| La-Beck, Ninh (Irene), Pharm. D. |
| Reddy, Hemachandra, Ph.D. |
| Reynolds, C. Patrick, M.D.,Ph.D. |
| Urbatsch, Ina, Ph.D. |
| Adjunct Membership |
| Escamilla, Michael, Ph.D. |
| Gatto, Craig, Ph.D. |
| O'Dell, Lauren E., Ph.D. |
| Woolard, Robert, M.D. |
| 55.22, 100010, 11221 |
| Emeritus |

| Lombardini, J. Barry, Ph.D. |
|-----------------------------|
| Norman, Reid L., Ph.D. |
| Syapin, Peter, Ph.D. |

Helpful links

GSBS Student Resource Center: https://www.ttuhsc.edu/biomedical-sciences/student/default.aspx

All GSBS required forms for students: https://student.ttuhsc.edu/biomedical-sciences/current/default.aspx

GSBS Academic Calendar: https://www.ttuhsc.edu/biomedical-sciences/calendar.aspx

GSBS Catalog: https://app4.ttuhsc.edu/CourseCatalog/default/Graduate-School-of-Biomedical-Sciences/2020%20-%202021/General-Policies