

**GUIDELINES FOR PROGRAM ADMINISTRATION BY THE FACULTY OF  
CELLULAR AND STRUCTURAL BIOLOGY**

1. Criteria for membership on the Graduate Faculty. Faculty colleagues whose primary appointments are outside of the Department of Cellular and Structural Biology must meet the following requirements:
  - A. Ph.D., M.D., D.D.S. (or equivalent) degree
  - B. Evidence of an active research program
  - C. Record of active participation in Cellular and Structural Biology's Graduate courses, laboratory rotations, comprehensive and qualifying exams and dissertation committees
  - D. Acceptance by one of the tracks (Biology of Aging, Cancer Biology, Cell & Molecular Biology, or Genetics, Genomics & Development)

2. Several faculty members will oversee the administration of the Cellular and Structural Biology Graduate Program as members of COGS. The members of COGS and the term of each position are:

**Chair of COGS** - 3 yrs. Appointment by the Chair of the Department of Cellular & Structural Biology.

Full time faculty member of Cellular and Structural Biology. Will be the Departmental Graduate Faculty Council (GFC) Representative and serve as a liaison between the Department and the Graduate Council for the purpose of completing all business matters related to the Cellular and Structural Biology Graduate program. Will oversee the efficient execution of all activities of COGS so that the Graduate Program is carried out in an organized fashion. Will schedule COGS meetings. The outgoing Chair will assist the newly appointed Chair with August activities to facilitate the transition.

**Leaders of CSB Tracks** – Appointment by the Graduate Dean.

Full time faculty member. Will oversee the efficient execution of all activities of the track so that the Graduate Program is carried out in an organized fashion. Will schedule Track administration meetings and report Track activities to COGS.

**Student Advisor** - 3 yrs. Appointment by the Chair of Department.

Full time faculty member of Cellular and Structural Biology. Will advise students, carry out student evaluations, supervise student rotations, monitor course requirements, and assure that deadlines and committee appointments are met. The outgoing Student Advisor will assist the newly appointed Student Advisor with Orientation and other August activities to facilitate the transition.

**Admissions Chair** - 3 yrs. Appointment by the Chair of Department.

Full time faculty member of Cellular and Structural Biology. Will appoint and work with a committee chosen to reflect the various research areas of the faculty of Cellular and Structural Biology. Provisions will be made for staggering terms of Committee members. Will supervise the selection of qualified candidates for the Cellular and Structural Biology Graduate Program.

**Seminar Program Chair** - 2 yrs. Appointment by COGS.

Will supervise student research seminars and obtain faculty evaluations of the student presentations.

**Journal Club Chair** - 2 yrs. Appointment by COGS.

Will organize and direct the departmental journal club where students and faculty will participate in discussing significant and recent publications.

**Awards Committee Chair** - 2 yrs. Appointment by COGS.

Will supervise the evaluation of students eligible for departmental, institutional, and other awards and will make recommendations to COGS on appropriate nominations for such awards.

**Anatomy Liaison** - 2 yrs. Appointment by COGS.

Will assist with all aspects of the graduate program involving students in the professional anatomy courses. This will include M.S. students with an emphasis on anatomical sciences, Ph.D. students who choose to take and/or teach in anatomy courses, and dual degree students. This individual will serve as the COGS liaison and ensure that any issues or special needs of these students are brought to the attention of COGS.

Attachment B

**TYPICAL COURSE PLAN FOR A Ph. D. STUDENT  
ENTERING IN THE FALL SEMESTER**

<u>Fall semester - first year</u>	Hours
Fundamentals of Biomedical Sciences	8
Research (rotations)	2
 <u>Spring semester - first year</u>	
Track specific core course	3 or 4
Other core courses	variable
*Colloquium	2
Research and Rotations	to 9 credit hours
 <u>Summer – first and following years</u>	
Research	4
Methods in Cell Biology	1
Seminar	1
 <u>Fall semester - second year</u>	
Experimental Design/Data Analysis	2
Scientific Writing	2
Seminar	1
Research	4
 <u>Spring semester - second year</u>	
Seminar	1
Research	7.5
Ethics	0.5
 Writing and defense of dissertation proposal must be completed by the Summer of the second year	
 <u>Fall/Spring semester - third year</u>	
Seminar	1
Dissertation (if proposal has passed COGS)	variable

\*Colloquium may also be taken in the summer of year 1.

Elective(s) (six credit hours of electives from an approved list must be taken anytime during training)  
Supervised Teaching (must be completed anytime during training)  
Seminar may be required in the summer semester to accommodate all the student presentations.

**TYPICAL COURSE PLAN FOR an M.D./Ph.D. STUDENT  
in Cellular & Structural Biology**  
(Biology of Aging; Cancer Biology; Cell & Molecular Biology; and  
Genetics, Genomics and Development tracks)

Years 1 and 2 will concentrate on medical coursework and rotations to identify a mentor. The Ph.D. portion of the degree is generally 4 years. In the seventh year the student will reintegrate into medical school and complete his/her medical training.

PhD. Program – specificities for each track are given in the track guidelines.

Year 3

Fall

INTD 5006 Principles of Cellular & Molecular Biology  
CSBL 5095 Experimental Design and Data Analysis  
CSBL 6097 Research

Spring

Track-Specific Core Course  
INTD 6002 Ethics  
CSBL 6097 Research  
CSBL 5089 Graduate Colloquium

Summer

CSBL 6097 Research

Year 4

Fall

CSBL 5077 Scientific Writing  
CSBL 6097 Research

Spring

Qualifying exam  
Advance to candidacy  
Define dissertation proposal  
Identify and meet with committee  
Approval of Dissertation proposal  
CSBL 6097 Research

Years 5 and 6\*

CSBL 6097 Research  
Meet with dissertation committee every 6 months  
Present research annually

General: CSBL 6090 Seminar/journal club is required for each semester during the Ph.D. phase of the program

Elective courses and supervised teaching are not required of the M.D./Ph.D. Students.

\*Two semesters of dissertation are required before graduation.

**TYPICAL COURSE PLAN FOR a D.D.S./Ph.D.  
in Cellular & Structural Biology**  
(Biology of Aging; Cancer Biology; Cell & Molecular Biology; and  
Genetics, Genomics and Development tracks)

The first 3-4 years will concentrate on Ph.D. training. After this period, the student will enter the D.D.S. program.

PhD. Program – specificities for each track are given in the track guidelines.

Year 1

Fall

Fundamentals of Biomedical Sciences	8
Research (rotations)	2

Spring

Track specific core course	3 or 4
Other core courses	variable
Colloquium	2
Research and Rotations	to 9 credit hours

Summer

Research

Year 2

Fall

Experimental design/data analysis	2
Scientific Writing	2
Seminar	1
Research	4

Spring

Ethics	0.5
Qualifying exam	
Advance to candidacy	
Define dissertation proposal	
Identify and meet with committee	
Approval of Dissertation proposal	
CSBL 6097 Research	

Years 3-4\*

CSBL 6097 Research  
Meet with dissertation committee every 6 months  
Present research annually

General: CSBL 6090 Seminar/journal club is required for each semester during the Ph.D. phase of the program

Elective courses and supervised teaching are not required of the D.D.S./Ph.D. Students.

\*Two semesters of dissertation are required before graduation.

Attachment C

**TYPICAL COURSE PLAN FOR AN M.S. STUDENT  
ENTERING IN THE FALL SEMESTER  
Biotechnology Track**

<u>Fall Semester - First Year</u>	Hours
Fundamentals of Biomedical Sciences	8
Research	1
 <u>Spring Semester - First Year</u>	
Research	4
Advanced Core Course or Elective(optional)	2-4
Ethics	0.5
 <u>Summer Semester - First Year</u>	
Research	4
 <u>Fall Semester - Second Year</u>	
Experimental Design/Data Analysis	2
Research (Thesis proposal should be presented to COGS during this semester)	6
 <u>Spring Semester - Second Year</u>	
Thesis	8

Note: The Seminar Course **MUST** be taken at least once during a student's tenure in the Program.

Attachment C

**TYPICAL COURSE PLAN FOR AN M.S. STUDENT  
ENTERING IN THE FALL SEMESTER  
Anatomy Track**

<u>Summer Semester - First Year</u>	Hours
Gross Human Anatomy (OT)	5
Research	1
 <u>Fall Semester - First Year</u>	
Gross Anatomy & Embryology (if the summer course was <b>NOT</b> taken)	7.5
Microscopic Anatomy	5
Research (if the summer course <b>WAS</b> taken)	4
 <u>Spring Semester - First Year</u>	
Neuroscience	4
Research	2-4
Ethics	0.5
 <u>Summer Semester - First Year</u>	
Research	4
 <u>Fall Semester - Second Year</u>	
Experimental Design/Data Analysis	2
Research (Thesis proposal should be presented to COGS during this semester)	6
 <u>Spring Semester - Second Year</u>	
Thesis	8

Note: The Seminar Course **AND** Supervised Teaching **MUST** be taken at least once during a student's tenure in the Program.

## GUIDELINES FOR PRESENTATION OF STUDENT SEMINARS

- WHY?** To provide students with the opportunity to develop seminar presentation skills.
- To provide faculty the opportunity to evaluate the student's progress on the research aims and to contribute their expertise.
- WHEN?** Second year students will present their dissertation proposals, including rationale and background, aims, any data obtained to-date, and the approaches to be used in the future.
- More senior students will present a progress report each year. The goal is to up-date the department on the aims, progress, and work remaining.
- WHAT?** Important components to include in **all** student seminars:
- Introduction:** presentation of the biological background which leads to the question being addressed.
- Hypothesis:** clear statement of the BBQ (big biological question) and/or your working hypothesis
- Specific Aims:** each specific aim should be presented. For each aim, the student should be certain to note any changes made to the plan, discuss progress and conclusions to-date, note any problems and efforts to circumvent them, and describe briefly future experiments left to perform.
- Summary:** restate progress to-date on all aims. Provide general conclusions and implications. What progress has been made in addressing the BBQ?
- HOW?** Students should present a clear, concise seminar which has been practiced first with the mentor!
- Slides should be carefully designed and checked ahead of time for visibility. Avoid the use of too much information on a single slide, print that is small and hard to read and colors that are difficult to discern on the background.

**Cellular and Structural Biology Graduate Program  
Laboratory Rotations**

I plan to rotate in the following laboratories:

Name of Faculty Member	Dates
1. _____ (please print)	_____
2. _____ (please print)	_____
3. _____ (please print)	_____

Changes in your planned rotations are acceptable and may be made after consultation with the Student Advisor.

Name: \_\_\_\_\_  
(please print)

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Please return this form to Ms. Jo Gail Stark and to the Graduate Advisor.**

**Cellular and Structural Biology Graduate Program  
Mentor Selection Form for M.S.**

Date: \_\_\_\_\_

Student Name: \_\_\_\_\_

I would like to request COGS approval of Dr. \_\_\_\_\_ as my **Proposed** Supervising Professor.

**Mentor agreement:**

I am willing and able to serve as the Supervising Professor for \_\_\_\_\_.  
(name of student)

\_\_\_\_\_  
Signature, Supervising Professor

**Please return this form to Ms. Jo Gail Stark and to the Graduate Advisor.**

Attachment G

**Department of Cellular and Structural Biology Graduate Program  
Evaluation of a Laboratory Rotation**

Student Name:

Faculty Name:

Inclusive dates of student's laboratory rotation:

Please comment on each of the following:

Was the student attentive and hard-working?

Was the student talented in the lab?

If the student requested to work in your lab, would you be willing to accept him/her?

Additional comments?

For the laboratory rotation, please give a grade of S (satisfactory) or U (unsatisfactory) below.

Grade \_\_\_\_\_

**Please address each of the questions above and return this form to Ms. Jo Gail Stark and to the Graduate Advisor.**

**Department of Cellular and Structural Biology Graduate Program**  
**Evaluation by the Committee Members - M.S. Student**

Student Name:

Month/Year Started Program:

Date of Meeting:

Has thesis proposal been approved:

*The student should complete the information above and distribute forms to faculty at his/her scheduled committee meeting.*

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**Committee member: *Please comment on issues that particularly need improvement.***

Was the presentation thorough and understandable?

Is the thesis project feasible in a reasonable period of time?

Was an identifiable hypothesis presented?

Do the experiments appear to be well planned and address the hypothesis?

Is the work sufficiently thorough, timely, and valid to form a basis for publication?

Does the student have the appropriate command of the literature?

Are the student's responses to questions clear and to the point?

Have at least some experiments been done thoroughly and finished?

Is the student likely to graduate by the target date listed above?

Additional comments:

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Committee Member Name:

Overall Evaluation of research progress (*Please circle*):

U      Unsatisfactory  
S      Satisfactory for this point in the program  
E      Excellent

*After each committee member has completed the evaluation, the student should collect the evaluations, review them with his/her supervising professor and then make two copies. One copy should be kept by the student; one copy should be given to Ms. Jo Gail Stark for inclusion in the student's file and the originals should be forwarded to the Student Advisor.*

**Department of Cellular and Structural Biology Graduate Program  
Evaluation by the Committee Members - Second Year Ph.D. Student**

Student Name:

Month/Year Started Program:

Date of Meeting:

*The student should complete the information above and distribute forms to faculty at his/her scheduled committee meeting.*

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**Committee member: *Please comment on issues that particularly need improvement.***

For the first semester:

1. Is the student attentive and hard-working?
2. Has a dissertation project with a testable hypothesis been identified?
3. Have potential committee members been identified?
4. Is the student becoming acquainted with the literature appropriate for the project?
5. Does the student design experiments and include appropriate controls?

For the second semester:

1. Is there an identifiable experimental plan?
2. Is there an identifiable hypothesis being tested?
3. Is the project feasible?
4. Was there an adequate explanation as to why the experiments are being conducted?
5. Is the student well informed?
6. Were the student's responses to questions clear and to the point?

Additional comments:

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Committee Member Name:

Overall Evaluation of research progress (*Please circle*):

- U     Unsatisfactory  
S     Satisfactory for this point in the program  
E     Excellent

*After each committee member has completed the evaluation, the student should collect the evaluations, review them with his/her supervising professor and then make two copies. One copy should be kept by the student; one copy should be given to Ms. Jo Gail Stark for inclusion in the student's file and the originals should be forwarded to the Track Student Advisor.*

**Department of Cellular and Structural Biology Graduate Program  
Evaluation by the Committee Members - Third Year Ph.D. Student**

Student Name:

Month/Year Started Program:

Date of Meeting:

Has preliminary exam been taken?

Has dissertation proposal been approved?

*The student should complete the information above and distribute forms to faculty at his/her scheduled committee meeting.*

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**Committee member: *Please comment on issues that particularly need improvement.***

Was the presentation thorough and understandable?

Does the student have the appropriate command of the literature?

Have at least some experiments been done thoroughly and finished?

Do individual experiments appear to be well planned with appropriate controls?

Does the student understand the limits of his/her experiments?

Is the dissertation project feasible in a reasonable period of time?

Are the student's responses to the questions clear and to the point?

Is the student applying personal initiative to the project?

Additional comments:

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Committee Member Name:

Overall Evaluation of research progress (*Please circle*):

U     Unsatisfactory  
S     Satisfactory for this point in the program  
E     Excellent

*After each committee member has completed the evaluation, the student should collect the evaluations, review them with his/her supervising professor and then make two copies. One copy should be kept by the student; one copy should be given to Ms. Jo Gail Stark for inclusion in the student's file and the originals should be forwarded to the Track Student Advisor.*

**Department of Cellular and Structural Biology Graduate Program  
Evaluation by the Committee Members - Fourth Year Ph.D. Student**

Student Name:

Month/Year Started Program:

Date of Meeting:

Has preliminary exam been taken?

Has dissertation proposal been approved?

Written progress:      Presented a paper or poster at national meeting?      \_\_\_\_\_

   Contributed to writing a paper or review?      \_\_\_\_\_

   Authored his/her own paper?      \_\_\_\_\_

*The student should complete the information above and distribute forms to faculty at his/her scheduled committee meeting.*

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**Committee member: *Please comment on issues that particularly need improvement.***

Was the presentation done well?

Is the work sufficiently thorough, timely, and valid to form the basis for publication?

Is the student adequately focused on a specific plan for finishing the dissertation?

Has the student thoroughly considered the meaning of his/her results?

Is the student's depth of knowledge and facility to deal with problems characteristic of an expert in his/her chosen field?

Additional comments:

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Committee Member Name:

Overall Evaluation of research progress (*Please circle*):

U      Unsatisfactory  
S      Satisfactory for this point in the program  
E      Excellent

*After each committee member has completed the evaluation, the student should collect the evaluations, review them with his/her supervising professor and then make two copies. One copy should be kept by the student; one copy should be given to Ms. Jo Gail Stark for inclusion in the student's file and the originals should be forwarded to the Track Student Advisor.*

**Department of Cellular and Structural Biology Graduate Program**  
**Evaluation by the Committee Members - Fifth (or beyond) Year Ph.D. Student**

Student Name:

Month/Year Started Program:

Date of Meeting:

Has preliminary exam been taken?

Has dissertation proposal been approved?

Written progress: Presented a paper or poster at national meeting? \_\_\_\_\_

Contributed to writing a paper or review? \_\_\_\_\_

Authored his/her own paper? \_\_\_\_\_

Target date for graduation: \_\_\_\_\_

*The student should complete the information above and distribute forms to faculty at his/her scheduled committee meeting.*

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**Committee member: *Please comment on issues that particularly need improvement.***

Was the presentation done well?

Is the work sufficiently thorough, timely, and valid to form a basis for publication?

Is the student adequately focused on a specific plan for finishing the dissertation?

Is the student's depth of knowledge and facility to deal with problems characteristic of an expert in his/her chosen field?

Is the student likely to graduate by the target date listed above?

Additional comments:

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Committee Member Name:

Overall Evaluation of research progress (*Please circle*):

U Unsatisfactory

S Satisfactory for this point in the program

E Excellent

*After each committee member has completed the evaluation, the student should collect the evaluations, review them with his/her supervising professor and then make two copies. One copy should be kept by the student; one copy should be given to Ms. Jo Gail Stark for inclusion in the student's file and the originals should be forwarded to the Track Student Advisor.*

## **Attachment H**

### **Format for the Dissertation Proposal**

All Ph.D. students in the Cellular and Structural Biology Graduate Program are required to write and defend a Dissertation Proposal. It should be written in the format of an NIH-postdoctoral grant application (NIH form SF424\_RR; Rev 6/2009) having a limit of 1 single-spaced page (not less than 11 font) to describe the Specific Aims and 6 pages for the Research Strategy including Significance, Background and Approach (including figures and tables). The section on Literature Citations is not included in the page limit, but it should not exceed two pages. The specifics of the Dissertation Proposal will be determined by the track.

**Note: The format for the written part of the Qualifying Examination and the Dissertation Proposal are identical, however there can be no overlap in topics.**

## **Format for the Thesis Proposal**

All M.S. students in the Cellular and Structural Biology Graduate Program are required to write and defend a Thesis Proposal. The thesis proposal should be written in the format of an NIH-postdoctoral grant application (NIH form SF424\_RR; Rev 6/2009) having a limit of 1 single-spaced page (not less than 11 font) to describe the Specific Aims and 6 pages for the Research Strategy including Significance, Background and Approach (including figures and tables). The section on Literature Citations is not included in the page limit, but it should not exceed two pages.

## **SCHEDULING FOR FINAL ORAL EXAMINATIONS AND BINDING OF DISSERTATIONS AND THESES**

There are certain procedures that must be followed for a student to complete in any given semester. The following is a suggested schedule for completion of the dissertation or thesis:

- Step 1.** Submit to the Supervising Professor and Supervising Committee a final draft of the Dissertation or Thesis. Allow 3 weeks for review and comments.
- Step 2.** Email Dr. Sophia Pina ([pina@uthscsa.edu](mailto:pina@uthscsa.edu)) a final electronic draft in pdf format of the Dissertation or Thesis. Allow three weeks for review and comments.
- Step 3.** Submit the following to Janice Stong in the Graduate Dean's Office 15 days before the scheduled date of the final oral examination.

- \* Form 40: Request for Final Oral Examination  
[http://gradschool.toolbox.net/files/resource/wi/2i/rsrc/FORM\\_40.pdf](http://gradschool.toolbox.net/files/resource/wi/2i/rsrc/FORM_40.pdf)

- \*3 copies of the abstract and vita

**Note:** For the final Oral Examination, a room should be reserved by the department's academic or COGS coordinator.

Allow sufficient time between the Final Oral Examination and the Graduate Faculty Council meeting, to complete any content or formatting changes or corrections to the Dissertation or Thesis that are required by the Supervising Committee, Committee on Graduate Studies or Dean's Office.

- Step 4.** Submit the following to Janice Stong in the Graduate Dean's Office **7 days** prior to the Graduate Faculty Council meeting:

- \* Form 41 for MS or Form 43 for PhD: Report on Final Oral Examination (signed by all members of the Supervising Committee and Chair of COGS.

- [http://gradschool.toolbox.net/files/resource/wi/2i/rsrc/FORM\\_41.pdf](http://gradschool.toolbox.net/files/resource/wi/2i/rsrc/FORM_41.pdf)

- [http://gradschool.toolbox.net/files/resource/wf/7f/rsrc/FORM\\_43\\_Rept\\_Final\\_Oral.pdf](http://gradschool.toolbox.net/files/resource/wf/7f/rsrc/FORM_43_Rept_Final_Oral.pdf)

- \*Approval Page taken from Dissertation/Thesis signed by Supervising Committee and COGS Chair.

- Step 5.** The outcome of the final oral examination and fulfillment of degree requirements must be reported to and approved by the Graduate Faculty Council at its monthly meeting. The Graduate Faculty Council meets on the second Friday of each month.

Following approval of your dissertation/thesis by the Graduate Faculty Council, and prior to leaving this institution, the following forms can be found at the GSBS website

<http://gradschool.toolbox.net/students/studentresources/current> and should be submitted to Janice Stong:

Graduation Forms, Master of Science

[Copyright Disclaimer](#)

[Forwarding Address Form](#)

[Library Copyright Permission](#)

[Listing Of Schools](#)

## Graduation Forms, Doctoral

[Copyright Disclaimer](#)

[Forwarding Address Form](#)

[Library Copyright Permission](#)

[Listing Of Schools](#)

[Survey Of Earned Doctorates](#)

**Step 6.** Binding instructions. A Memorandum for Binding can be obtained from Ms. Jo Gail Stark. This memo along with the correct number of dissertations/theses (printing on cotton paper is optional) are taken directly to the UTHSCSA library for binding and payment. **The UTHSCSA library will not make copies from your electronic dissertation/thesis.** Payment can be made by cash, check or credit card to the UTHSCSA library.

**APPROVAL FORM FOR THESIS PROPOSAL**

**This form must be signed by all local members of your Thesis Committee.**

The member of the committee who is located outside of the Health Science Center need not sign below, but he/she should be sent a copy of the proposal once it is approved by COGS.

We, the members of the Thesis Committee of \_\_\_\_\_, have seen, read, and approved her/his Thesis Proposal. We agree that it is ready for presentation to the Committee on Graduate Studies of the Cellular and Structural Biology Program.

\_\_\_\_\_

(Mentor)

\_\_\_\_\_

(Member, C&SB)

\_\_\_\_\_

(Member, C&SB)

\_\_\_\_\_

(Member, C&SB - optional)

\_\_\_\_\_

(Member, Outside C&SB)

Attachment K  
GSBS Forms

GSBS Form 31: Petition for Admission to Candidacy for the degree of Master of Science

GSBS Form 42: Composition of Supervising Committee – Master of Science Degree

GSBS Form 40: Request for Final Defense and Oral Examination

GSBS Form 41: Report on Final Oral Examination – Master of Science

GSBS Form 32: Petition for Admission to Candidacy for the degree of Doctor of Philosophy

GSBS Form 30: Recommendation for Approval of Dissertation Research Proposal and Supervising Committee

GSBS Form 43: Report on Final Oral Examination – Doctor of Philosophy