School of Health and
Rehabilitation Sciences

Communication Science and Disorders PhD Program Handbook 2023-2024

University of Pittsburgh

CSD PhD Handbook – <mark>Version date: August 18, 2023</mark>
Table of Contents

ABOUT THIS HANDBOOK

This handbook is intended to serve as a guide to the <u>mission</u>, <u>training goals</u>, and <u>structure</u> of the CSD PhD program, and the <u>policies and procedures</u> that should guide students as they work toward accomplishing their PhD training goals. It also describes some <u>resources</u> available to support CSD PhD students as they work toward their training goals. It supplements material available from the University of Pittsburgh Provost's office (**www.pitt.edu/~graduate**) that provides Regulations Governing Graduate Study, along with the University's Graduate and Professional Bulletin and information about a wide array of Student Services. **It is a work in progress**. If you have suggestions, updates, or corrections for this handbook, or a question regarding the policies and regulations described here, please contact the director of CSD PhD programs (Dr. Leah Fabiano-Smith).

MISSION OF THE CSD PhD PROGRAM

The <u>mission</u> of the CSD PhD program is to prepare the next generation of researchers driving the generation, dissemination, and application of knowledge in the science and practice of audiology and speech-language pathology.

EQUITY, JUSTICE, AND INCLUSION (EJI) IN THE CSD PhD PROGRAM

Consistent with the <u>mission</u> of the CSD PhD program, the program aims to ensure that the next generation of researchers in communication science and disorders is <u>prepared to address and advance concerns of equity, justice, and inclusion (EJI) in research, in the laboratory and classroom, and in everyday practice</u>.

Co-Creating a Healthy Culture of EJI in Pitt CSD
Conversations about EJI in our field will inevitably overlap with political and social issues and can often feel uncomfortable and challenging. In these moments of opportunity to share and receive differing viewpoints, everyone involved in the discussion will be asked to communicate as thoughtfully and respectfully as possible. We seek to create a culture of humility in which all stakeholders are committed to actively promoting EJI in Pitt CSD. This will often require that individuals self-reflect and self-inspect to identify (and then dismantle) their biases that might harm others. We also seek to create a culture in which each EJI-committed stakeholder is met and supported wherever they are on their own personal EJI journey, while also being held accountable for any words and deeds that have the potential to cause harm. As such, we will try to "call people in" rather than "calling them out" or "cancelling them," as much as possible. Sometimes this will require that others step in to help promote healthy dialogue. Because interpersonal problems are often best-solved with interpersonal solutions, we encourage students to ask for support from others to ensure that space is held for them to voice or respond to concerns. Any of the below individuals (see next section) may be called in to help facilitate these conversations.

Communicating Concerns in the Domain of EJI
Our faculty and staff will do their best to moderate discussions related to EJI as appropriate, but some issues might need greater support and several avenues are available to students. If you have concerns or complaints about how a conversation was managed or how the learning environment is being maintained, consider the following options.
- Students are encouraged to connect directly with the relevant parties. You can address the issue in the moment if you feel comfortable doing so, you can ask the individual(s) to touch base immediately following class or during an upcoming break in the lecture, you can request a private meeting, or you can share your concerns via email.

- Students can also share their observations with a CSD Student Representative for Equity, Justice, and Inclusion (SREJI), with or without a request that the concern be communicated up to the faculty level. The SREJI email address is PittCSD_SREJI@groups.pitt.edu. SREJIs are volunteers who self-select to engage in this form of departmental service, and a SREJI representative joins at least one faculty meeting per month to convey concerns and information to the full body of faculty. All students committed to upholding EJI in Pitt CSD are welcome to serve as SREJIs.
- Students are invited to communicate with Dr. Leah Helou (she/her), whose major departmental service role is centered on supporting healthy evolution of the EJI mission or Dr. Nancy Gauvin (she/her), Associate Dean for Equity, Diversity, Inclusion and Community Engagement for the School of Health and Rehabilitation Sciences.
- If your concern relates to bias incidents of harassment, discrimination, or sexual misconduct, you may report the incident directly to the university's Office of Civil Rights by phone (412-648-7860), e-mail (titleixcoordinator@pitt.edu, or by making a formal report (https://www.diversity.pitt.edu/make-report/report-form).
- If you have concerns you would like to formally address that do not meet Title IX standards (or you don't wish to take that route), the optimal "chain of command" is as follows. As noted above, it may be ideal to address the issue directly with the party(-ies) involved. You may alternatively/also raise your concerns to the attention of the PhD Program Director. Next, the concern would be raised to the Vice-Chair of Clinical Education or the Vice-Chair of Academic Affairs depending on the context of the issue (i.e., in clinical instruction or classroom instruction). The next step would be to meet with the Department Chairperson. Please note that while faculty and staff are not generally required to report bias incidents shared with them, they *are* required to report disclosures of sexual misconduct having affected a university community member.
- If you wish to maintain complete confidentiality and would like some support as you process your experiences, you may contact the University Counseling Center (412-648-7930).

Please also refer to the EJI-specific page on our departmental website for resources. https://www.shrs.pitt.edu/csd/about/csd-inclusion-initiative No student will be penalized for voicing any concerns or complaints. We hope to honor the spirit of our EJI mission as well as the essence of our field as communication specialists by engaging in healthy community-based dialogue. We thank you for helping to co-create a healthy environment for all community members.

Resources and Support in the Domain of EJI
One of our goals is to provide resources so you will feel included in the Pitt Community and for you to find the connections, affinity groups and community that will support your time here at Pitt. We have highlighted a few below. As noted above, please also refer to the EJI-specific page on our departmental website for resources: https://www.shrs.pitt.edu/csd/about/csd-inclusion-initiative If you come across additional resources that we should share, please let us know and we'll include them.

University-level supports: See https://www.diversity.pitt.edu/diverse-populations for details on identity-based student groups.

SHRS-level supports: As of June 2022, student-directed affinity groups are in formation to provide community and fellowship for traditionally underrepresented and marginalized groups in SHRS. Students can email affinitygroups@shrs.pitt.edu for more information and stay tuned to school-level communications for information about the evolution of these groups.

You can find gender neutral bathrooms available on the third floor of Forbes Tower, which all students should be able to access via elevator without special permission.

Forbes Tower Room 4058 is reserved as a lactation room. Faculty, staff, and students have access to this room. It is unlocked every morning and there is signage that you can use to indicate that the room is in use.

GOALS OF THE CSD PhD PROGRAM

The Department of Communication Science and Disorders (CSD) aims to provide a comprehensive program of primary research, training, and clinical education that will advance the understanding of normal processes in human communication, aerodigestive function, swallowing, balance, and related domains, pathophysiology of diseases leading to disorders in these domains, as well as assessment, treatment, and management of disorders impacting these processes across the life span. The Ph.D. program in Communication Science and Disorders is an individualized, mentored, interdisciplinary research degree intended to develop leaders in research, teaching, and service. The primary aim of the Ph.D. program is to prepare students for responsible and productive careers as teacher-scholars, by equipping them with necessary knowledge and skills in primary disciplines of audiology and speech-language pathology. In fulfilling this mission, faculty in the department as well as researchers in the University and allied programs in the greater Pittsburgh community contribute to the training of Ph.D. students and the development of scholars specializing in human communication and aerodigestive science and disorders.

The Ph.D. training goals described above are to be achieved by attaining the core CSD Ph.D. competencies described in Table 1 below.

Table 1: CSD Ph.D. Core competencies

1. Comprehensive depth and breadth of knowledge in program specialization within Communication Science and Disorders (CSD)
a. Specialized training: Acquire core knowledge of critical concepts, methodologies, and theoretical frameworks in a chosen specialized area within CSD.
b. Interdisciplinary breadth: Develop understanding of an interdisciplinary perspective, and ability to assess how related fields merge and intersect with selected specialized area.
c. Theoretical grounding: Develop critical thinking and analytical skills needed for practicing scientists in chosen specialized area within CSD
2. Develop ability to conduct and communicate scholarly research
a. Analytical methods: Demonstrate an understanding and application of statistical theory and experimental design required for conducting novel research in CSD
b. Research conduct: Develop the ability to conduct independent research projects within selected specialized area within CSD
c. Scientific communication: Develop the ability to communicate critical scientific information effectively in oral and written modalities
3. Professional preparation in CSD
a. Teaching and mentoring preparation: Acquire teaching and mentoring experience
b. Grantsmanship: Develop the ability to procure funding for research and other scholarly pursuits
c. Ethical conduct: Develop an understanding of research ethics and incorporate ethical standards in own research
d. Professional practice: Develop the ability to evaluate disciplinary research and contribute to the scientific review process
4. Professional and career development
a. Professionalism and service: Acquire service experience inside and outside CSD (academic, professional, community)
b. Management and leadership: Develop management and leadership skills needed for academic success
c. Career development: Develop and refine tools needed for post-PhD placement and long-term success

These core competencies are achieved through a variety of formal and informal activities, including didactic classwork inside and outside CSD, workshops and other training experiences, laboratory experiences, and both formal and informal mentoring. These activities are further described in the CSD PhD curriculum map, below.

STRUCTURE OF THE CSD PhD PROGRAM: CSD and the broader training environment

CSD at the University of Pittsburgh is embedded in a rich research and clinical context. This context enables students to craft their own individualized training plan, enabling attainment of the training goals and core competencies above.

CSD is housed in the School of Health and Rehabilitation Sciences (SHRS). Other departments in SHRS include: Health Information Management, Occupational Therapy, Physical Therapy, Rehabilitation Science and Technology, and Sports Medicine and Nutrition. SHRS also has programs in Disability Studies, Emergency Medicine, and Rehabilitation Counseling. CSD shares with other departments in SHRS the goals of advancing the basic science of critical human capacities (like communication), understanding the nature of and improving treatment for disorders affecting those capacities, and promoting successful living by people with related disabilities.

There are 2 PhD programs in SHRS: the CSD PhD program, and the PhD in Rehabilitation Science (RS). Students in the CSD and RS PhD programs interact informally, in the context of shared courses (such as the statistics sequence taught by Dr. Lauren Terhorst), research labs, and presentations and seminars. The CSD PhD program is one of the largest in the country. There are also several professional doctorate programs in SHRS, including the Doctor of Audiology (AuD), Doctor of Clinical Science (CScD) in Speech-Language Pathology, and the Doctor of Physical Therapy (DPT). CSD PhD students may also interact informally with students with other professional programs in CSD and SHRS, in the context of classes, labs, and seminars.

Pitt CSD is also embedded in and enriched by a strong network of clinical and research partner programs across the University of Pittsburgh and the broader Pittsburgh community. These include departments within Pitt and the University of Pittsburgh Medical Center (such as Neuroscience, Otolaryngology, Engineering, Education, and Psychology), allied institutions in Pittsburgh (such as Carnegie Mellon University, Duquesne University, the Center for the Neural Basis of Cognition, and the Learning Research and Development Center), and clinical partner institutions (including the University of Pittsburgh Medical Center and VA Pittsburgh Healthcare System). CSD PhD students may take advantage of coursework, research, and clinical experiences across these programs as they build a personalized program of study, designed to help them to attain their training goals.

STRUCTURE OF THE CSD PhD PROGRAM: CSD PhD curriculum map

The CSD PhD program helps students to attain their training goals by providing them with a structured set of formal and informal training experiences across classroom, laboratory, and other settings, leading to achievement of key program milestones. The CSD PhD curriculum map in Table 2 below lays out these training experiences and milestones and shows how they map onto achievement of the CSD PhD core competencies described above (Table 1).

Table 2: CSD PhD curriculum map

1. Comprehensive depth and breadth of knowledge in CSD	Coursework	Milestones	Informal activities
Specialized training:	Research practicum (CSD 3971); Courses outside CSD	Pre-dissertation project	Experiences inside home lab
Interdisciplinary breadth:	CSD PhD seminars: Translational challenges in CSD (CSD3049: T0-T2, CSD3479: T2-T4); Courses outside CSD; PhD pro-seminar (CSD 3060)	None	Lab experiences outside home lab
Theoretical grounding:	CSD PhD seminars (CSD3479, CSD3049) Intro to PhD Studies (CSD3048) PhD comps (CSD2972)	PhD comps, Prospectus	Lab experiences
2. Conducting and communicating scholarly research			
Analytical methods:	12 credits: basic methods (HRS 2927-2928); research design (PSYED 2030, BCHS 2520); advanced methods	Pre-dissertation project, Prospectus	Lab experiences
Research conduct:	Research practicum (CSD 3971) Dissertation credits (CSD3000)	Pre-dissertation project Dissertation	Lab experiences; RCR Workshops https://ctsi.pitt.edu/education-training/responsible-conduct-of-research-training/
Scientific communication:	Intro to PhD Studies (CSD3048) PhD pro-seminar (CSD 3060)	Comps (written deliverable, oral defense) Prospectus defense Dissertation defense Article submission requirement	CSD 3048 presentations (1st year); pre-dissertation presentations in RRT (2nd year); Lab meetings

Table 2: CSD PhD curriculum map (continued)

3. Professional preparation in CSD			
Teaching and mentoring preparation:	Teaching practicum (CSD 2970), TA position, FACDEV 2200, CRTL certificate (Associate level)	None	
Grantsmanship:	Grantwriting course (not required)	Grant application requirement (SHRS)	Assisting mentor with grant applications; submitting own applications (F31; SHRS diss grant)
Ethical conduct:	Not required		Ethics training requirements for F31
Professional (research) practice:	Intro to PhD Studies (CSD3048) PhD pro-seminar (CSD 3060)	None	
4. Professional and career development			
Professionalism and service	Professionalism Series offered by the Center for Doctoral and Postdoctoral Career Development https://www.dpcd.pitt.edu/doctoral-and-postdoctoral-professionalism-series; CSD 3060 (2nd year PhD student organizers)		Service on CSD, University, or external organizations; co-review of journal articles with mentor; collaborations internal/external to home lab; Pitt CSD podcast (PhD student organizers); Serving as PhD student representative
Management and leadership	RCR Workshops https://ctsi.pitt.edu/education-training/responsible-conduct-of-research-training/ (optional)	Management of pre-dissertation project, dissertation project	Achieved through labwork (e.g., training/managing UG or junior graduate-student lab members), serving as PhD student representative
Career development	Center for Doctoral and Postdoctoral Career development (e.g., negotiating a job offer; interviewing skills) https://www.dpcd.pitt.edu/calendar-of-events (optional) PhD pro-seminar (CSD 3060)		Achieved through labwork (e.g., reviewing job descriptions; drafting, giving/receiving feedback on application materials, interviews, job talks)

The coursework requirements and milestones described in the CSD PhD curriculum map are further described below in the relevant Policies of the CSD PhD Program subsections.

POLICIES OF THE CSD PhD PROGRAM: SHRS PROGRAM REQUIREMENTS
This section lists requirements for all SHRS PhD students (both CSD and RS). They are listed in the chronological order in which they must be completed (earlier to later in the program).

Program Entry Requirements
When students enroll in the CSD PhD program, they will need to (1) complete a module on plagiarism, and (2) read and acknowledge their agreement to abide by the relevant student handbooks.

Plagiarism module: Successful completion yields a certificate; please print it and submit a copy to the CSD Academic Affairs Administrator for your file. Please contact the Assistant to the Associate Dean of Graduate Studies, Courtney Fleck (Courtney.fleck@pitt.edu), for a link and instructions on completing this module.

Handbook acknowledgment: Incoming students need to sign and submit a form indicating that they have read and understood, and agree to abide by, the policies in (a) the SHRS Graduate Student Handbook (which you can find at http://www.shrs.pitt.edu/current-students/student-handbooks) and (b) this handbook (CSD PhD handbook). *Please contact the Administrator for Academic Affairs, Laura Martin (lmm322@pitt.edu), who will generate a DocuSign version of the Handbook Acknowledgment form to complete*. This form must be completed and submitted by either October 1 (for students beginning the PhD program in the Fall term) or February 1 (for students beginning the PhD program in the Spring term) of the year you enroll in the CSD PhD program.

SHRS Manuscript and Grant Submission Requirements
(NOTE: These requirements apply to all SHRS PhD students, CSD and RS)
Manuscript submission requirement
    Prior to scheduling the dissertation defense, each PhD student will demonstrate a minimum amount of experience in manuscript writing and submission by completing:
- 1 co-authored manuscript accepted for publication, and
- 1 first authored manuscript submitted and reviewed by a peer-reviewed journal.

    Data-based manuscripts are strongly preferred.

Grant submission requirement
    Prior to scheduling the dissertation defense, each PhD student will demonstrate a minimum experience with grant writing and submission by completing one of the following:
- Submission and peer-review of a Doctoral Research or Research Fellowship Grant applications (these can be from NIH, Private Foundations, or the SHRS Dissertation Grant Award)
- Submission and peer-review of Pilot study grant applications (e.g., foundations, professional societies, the UPMC Rehab Institute Pilot Award)
- Completion of a grant writing course
- Submission and peer-review of a patent application
- Submission and peer-review of an SBIR like applications, or other options to secure funding for technology development (pitching an idea for commercial development, etc.)

POLICIES OF THE CSD PhD PROGRAM: CSD PhD PROGRAM REQUIREMENTS

This section lists requirements for all CSD PhD students. These are specific to the CSD PhD program and are in addition to the SHRS PhD student requirements listed above. These requirements are again listed in roughly the chronological order in which they must be completed (earlier to later in the program).

Minimum academic requirements

CSD PhD students must earn a 3.0 GPA or better in their courses during each semester of the PhD program. Failure to maintain a 3.0 GPA will result in re-evaluation of a student's admission to the program. Any students who do not maintain a 3.0 GPA will be asked to meet with their mentor and the PhD Program Director to discuss their progress in the program. The mentor, PhD Program Director, and CSD Department Chair will consider appropriate actions and/or develop plans for additional support. See **Minimum Grade-Point Average: Probation, Dismissal, Candidacy and Graduation** below for further details.

Academic Advisor, Plan of Study, and Plan of Study Committee

Academic advisor
Upon admission to the CSD PhD program, you will be assigned an academic advisor, who will serve as your primary research mentor. Any change of advisor must be agreed on by the student and the advisor in discussion with the CSD PhD Program Director, and must be reported to the Dean's office using the Change of Academic Advisor form on the SHRS Current Student: Forms site (at https://www.shrs.pitt.edu/current-students/forms). *Please contact the Administrator for Academic Affairs, Laura Martin (lmm322@pitt.edu), who will generate a DocuSign version of the Change of Academic Advisor form for you to complete.*

Plan of Study
By mid-term of their first semester in their PhD program (October for fall semester, March for spring semester), CSD PhD students must draft a Plan of Study in consultation with their mentor. This plan of study will consist of two components:

1. Brief statements of the student's **relevant previous experiences** (including coursework, laboratory experiences, and research projects), longer-term **goals**, **strengths**, and **weaknesses**
2. A list of the **courses** and **other training experiences** to be completed each term, addressing the student's goals, strengths, and weaknesses, and an approximate **timetable** for completion of coursework and program milestones

You can find each term's course offerings in the University's schedule of classes (at https://catalog.upp.pitt.edu/index.php), and other universities' course offerings (such as CMU) can be found on-line. Please also take advantage of previous Plans of Study shared by other PhD students in the CSD PhD Shared Resources folders, created and maintained by the PhD student body. It is important to note that this plan is not at all "set in stone" and often changes during a student's course of studies.

Your plan of study will include a Plan of Study course-listing form, in which you will list the courses you intend to take during your PhD program. The SHRS Registrar requires you to submit the course-listing portion of your plan of study on the approved CSD-specific PhD Plan of Study form. *Please contact the Administrator for Academic Affairs, Laura Martin (lmm322@pitt.edu), who will share a DocuSign version of the CSD PhD Plan of Study form with you for you to complete and for you and your advisor to sign.*

Plan of Study committee
Also by mid-term during the first term of their PhD program, students must select a Plan of Study committee in consultation with their mentor. The Plan of Study committee must consist of at least **3 full-time faculty members of CSD**. The purpose of this committee is to provide advice, support, and guidance as students progress through the program, to approve their plan of study, and to monitor their progress in the program. (*Note: the plan of study committee may but need not be your comprehensive examination or dissertation committee.*)

By the first month of their second term of enrollment in the program (February of Year 1 if you start the PhD program in fall term, October of Year 2 if you start in spring term), students must convene their initial Plan of Study meeting. At this meeting, the student will present their Plan of Study documents. The Plan of Study Committee will **review and approve the Plan of Study**, suggesting changes as needed. Following your initial Plan of Study meeting, your initial Plan of Study coursework form must be submitted to the CSD Academic Affairs administrator. *Please contact the Administrator for Academic Affairs, Laura Martin (lmm322@pitt.edu), who will share a DocuSign version of the CSD PhD Plan of Study form for you to complete and for you and your advisor to sign.*

Annual Progress Report and Annual Progress Meetings

Annual progress report
Starting in their second year in the program, students will be required to *submit an annual progress report*. They must submit this report by August 15 of each academic year. They will submit this progress report by completing the CSD PhD Student Annual Report Qualtrics Survey, available here: https://pitt.co1.qualtrics.com/jfe/form/SV_3xClp3tNPFN8FU2. A copy of this form will be submitted to the student's advisor, the CSD Academic Affairs administrator, the CSD PhD Program director, and the SHRS Graduate Studies Administrator. *The Academic Affairs Administrator, Laura Martin, will generate a DocuSign version of this form for the student and their advisor to sign.* Annual progress reports must be submitted once annually, from the end of the student's first year of the PhD program until you graduate.

Annual progress meeting
By October 1 of each academic year, students will be required to convene an annual progress meeting. In the annual progress meeting, the student and their Plan of Study committee or their dissertation committee (once they have advanced to candidacy) will review the student's progress for the year – particularly progress toward program milestones like completing coursework or their pre-dissertation project. The student and their committee will also highlight their achievements in research, teaching, service, and professional development, discuss any changes to their plan of study, and their plans for the upcoming year. The student is responsible for scheduling the annual meeting and updating the Plan of Study as needed. The student is also responsible for **submitting a revised plan of study** to the CSD Academic Affairs administrator. The student's mentor is responsible for **submitting a summary of the annual progress meeting** to the CSD PhD Program director.

Annual PhD Program Director Review

The PhD program director will meet annually with each PhD student, following the student's annual progress meeting. **The student is responsible for scheduling this meeting**. In the meeting, the PhD program director and the student will discuss the student's annual report and their mentor's summary of the annual progress meeting, as well as the student's perspective on their own progress and their relationship with their mentor and mentoring committee. Following this meeting, the PhD program director will prepare an annual progress-review letter for the CSD Chair's review and signature.

Teaching experience requirement

One of the key competencies of the CSD PhD program is *acquiring teaching experience* (Competency 3a: Professional Preparation in CSD - Teaching Preparation).   In order to support achievement of this competency, students must complete a teaching experience during their PhD program. This requirement can be satisfied in one of three ways, with the choice of teaching experience to be made with guidance from the student's mentor:

1. Serving as a Teaching Assistant for a laboratory course section offered through CSD. These are CSD 1027 (Anatomy and Physiology of Speech Lab, accompanying CSD 1023, A&P of Speech), CSD 1029 (Anatomy and Physiology of Hearing Lab, accompanying CSD 1024, A&P of Hearing), CSD 1028 (Hearing Science Lab, accompanying CSD 1025, Hearing Science), CSD 1030 (Speech Science Lab, accompanying CSD 1026, Speech Science), or CSD 1234 (Evaluation and Treatment Writing Practicum, accompanying CSD 1231, Evaluation and Treatment of Communication Disorders). Selection of students for this limited set of positions is competitive and is made by the course instructors, in coordination with the Director of Financial Aid.
2. Registration for FACDEV 2200, Practicum on University Teaching, or CSD 2970, Teaching Practicum. These variable-credit courses (1-3 credits) provide structured opportunities for students to develop teaching skills under the guidance of an experienced instructor. See example CSD 2970 learning contracts and FACDEV 2200 syllabi in the Teaching Training Resources folder. These teaching-training opportunities are intended to be completed in conjunction with an existing CSD course. If pursuing a registration for CSD 2970 or FACDEV 2200, students must consult with the Vice-Chair for Academic Affairs regarding their planned choice of existing CSD course and instructor.
3. Complete the Associate Level of CIRTL Certification through Pitt's Center for Integrating Research Teaching and Learning. CIRTL is an NSF-sponsored program hosted by the Department of Engineering focused on STEM teacher training. See description of requirements and instructions for registration here.

This teaching requirement is effective for PhD students entering during the 2020-2021 academic year and thereafter. Other teaching experiences may be considered for satisfaction of the teaching requirement; requests for consideration of such alternative experiences should be directed to the PhD Program Director.

Coursework Requirements

The CSD PhD program is intended to provide students and their mentors with significant flexibility in designing a course of study. The specific coursework requirements for the program are summarized in Table 3 and further described below. All these coursework requirements must be completed before admission to candidacy (i.e., beginning full-time dissertation work/entering full-time dissertation status [FTDI]).

Table 3: CSD PhD coursework requirements

Required Courses	Course #	Credits/sections
Introduction to PhD Studies	CSD 3048	3 credits
Translation Challenges in CSD (T0-T2 research)	CSD 3049	3 credits
Translation and Innovation in CSD (T2-T4 research)	CSD 3479	3 credits
Research Design and Statistics Courses	various	Total of 12 credits
Research Practicum	CSD 3971	Total of 6 credits
PhD Comprehensive Exams	CSD 2972	3-6 credits
Dissertation Research (taken while students work on prospectus, prior to FTDI status)	CSD 3000	Various
Proseminar CSD 3060 (taken every Fall and Spring term until FTDI status)	CSD 3060	0 credits
Electives	Various	Various
Total number for credits needed for PhD degree (beyond a bachelor's degree)		**72 credits**

** a minimum of 36 credits must be taken while a student of SHRS at the University of Pittsburgh.

PhD Seminar sequence: Translational Challenges in CSD (CSD 3049, 3479)
Beginning with students enrolling in the 2022-2023 academic year, all students enrolled in the PhD program in Communication Science & Disorders must take the two-course PhD seminar sequence, "Translational Challenges in Communication Science and Disorders." These courses provide foundational exposure to research questions and methods in both the hearing/sensation/perception/balance and speech/language/voice/swallowing domains, across the T0-T4 translational continuum. The first course in this sequence (CSD 3049, offered in fall) addresses the challenges and opportunities in translation from basic science (T0: including animal, cellular, and computational models) to human processes and performance (T1) and disorders (T2), and vice versa (T2 back to T0). The second course in this sequence (CSD 3479, offered in spring) addresses translation and innovation in CSD, from assessment

and treatment of disorders (T2) to clinical practice (T3) and policy, technological innovation, and community engagement (T4).

Introduction to PhD Studies (CSD 3048)
The <u>Introduction to PhD Studies</u> course is required of all PhD students. This course focuses on developing critical skills in identifying and formulating scientific questions, scientific communications, research ethics and research management, and professional development. It also provides first-year PhD students a focused opportunity to develop and received iterative feedback on their pre-dissertation projects. This course is offered annually, in the spring term.

Pro-Seminar (CSD 3060)
The <u>PhD Pro-Seminar</u> is a required non-credit course (CSD 3060) that **all PhD students must register for and attend each term until they enter full-time dissertation status** (FTDI). The Pro-Seminar co-meets with Research Round Table (RRT), meeting for one hour each week. It features both research presentations (CSD's annual speaker series) and professional-development sessions intended to foster PhD students' training and professional development.

This course provides you the opportunity to learn about content and advances outside of your own interest area, to observe faculty and other PhD students as they model scholarly discussion, to receive feedback on research plans or presentations from colleagues (students and faculty), and to hone your own scholarly skills, including speaking and answering questions in front of an audience and posing questions to/participating in discussions with other speakers. *Students are expected to attend and participate actively in these sessions*. During the second year of the PhD program, <u>each student will be required to talk about their research</u>. In addition, <u>second-year PhD students are responsible for co-organizing the RRT speaker series and co-developing professional-development sessions</u>, together with the CSD PhD Program Director and CSD's Office of Research.

Statistics and Design
Students are required to take <u>a minimum of 12 credits of statistics and experimental design</u>. Typically, this translates to a minimum of 3 courses in statistics and 1 in experimental design. Students typically enroll in an introductory statistics sequence during each of their first two terms in the program, and a more advanced statistics or analysis course to be chosen in consultation with their advisor. The more advanced course should align with the research interests of the student and could include multilevel modelling, item-response theory or psychometrics, clinical-trial or epidemiological methods, or survey or qualitative analysis methods. The experimental design course may be scheduled either concurrently with or following the introductory statistics courses.

SHRS has two graduate courses in statistics – open to CSD and RS PhD students – that will serve many students' needs for 6 of these 12 credits. *CSD PhD students are strongly encouraged to take these courses to satisfy their introductory stats sequence requirements.* These courses are taught by Professor Lauren Terhorst (Occupational Therapy) and are:

> (1) <u>HRS 2927: Statistical Methods for Health Science Research I</u>, 3 credits - the first of a two-course series. Topics covered include measurement, frequency distributions, histograms, bar graphs, stem-and-leaf displays, boxplots, scatterplots, measures of central tendency, measures of

variability, point estimation, interval estimation, sampling distributions, one and two-sample tests of hypotheses for means and an introduction to non-parametric tests.

(2) HRS 2928: Statistical Methods for Health Science Research II, 3 credits - the second of the two-course series. Topics covered include one and two way analysis of variance, multiple comparisons for main effects and interactions, analysis of covariance, multiple comparisons for adjusted means, correlation, simple linear regression, multiple regression, and meta-analytic methods.

While the 12 credits are mandatory, students may request an exception to this requirement. If you have previously taken advanced statistics and/or design courses you can check with your advisor and plan of study committee about an appropriate course of action. Please see **Procedures for Requesting Exceptions to PhD Program Requirements**, below.

Other possible courses to fill out your 12-credit sequence include:

> Introductory statistics sequence:
> PSYED 2018 – STATISTICS 1
> PSYED 2019 – STATISTICS 2: ANOVA
>
> Experimental design:
> PSYED 2030 - EXPERIMENTAL DESIGN
> BCHS 2525 – INTRODUCTION TO APPLIED RESEARCH
>
> Advanced topics in statistics and analysis methods
> HRS 2582 - ANALYSIS OF CLINICAL DATA/EVIDENCE FUNCTIONAL CHANGE
> NUR 2011 – APPLIED STATISTICS FOR EBP (evidence-based practice)
> PSY 2575 – TOPICS IS PSYCHOLOGY: LINEAR MIXED EFFECTS MODELS IN R
> PSYED 2410 - APPLIED REGRESSION
> PSYED 3416 - MULTIVARIATE STATISTICS
> STAT 2200 – APPLIED NONPARAMETRIC STATISTICS
> STAT 2391 – ADVANCES IN APPLIED STATISTICS

Additional statistics and design courses are offered through PSYED and other departments. Registering for additional credits in these areas is encouraged if it makes sense for your plan of study.

Research Practicum (CSD 3971)
Students most complete at least 6 credits (typically, two 3-credit registrations) of research practicum, designed to provide them with focused experiences in specific research methods under the guidance of a faculty mentor. Students should register for a section of CSD 3971 to support work on/completion of their pre-dissertation project (see description below). Students often register for CSD 3971 to support "lab rotation" experiences, gaining experience with key methodologies outside their primary ("home") lab. Students should not register for independent study credit for research experiences. Research practicum, directed research (Register with advisor's section number), or dissertation research are the courses used to complete a research rotation in home or visiting labs.

Dissertation Credits (CSD 3000)

Students must register for CSD 3000 (Dissertation Credits) while they work on their prospectus, and until they have are admitted to candidacy (chosen a dissertation committee, successfully defended their prospectus before the dissertation committee, and received the go-ahead from the committee to start their dissertation research).

Electives

Courses satisfying these requirements are determined by the advisor and student in constructing the plan of study. Elective courses are used to provide focused background knowledge and skills related to the student's area of interest or research focus. These courses are commonly taken outside CSD (for example, in Psychology, Neuroscience, Biology, the Clinical and Translational Sciences Institute, Neurobiology, Epidemiology, Economics, or Biostatistics). Students may also register for directed studies with CSD faculty to address specific topics of interest (for example, implementation science, animal models in hearing science, or laryngeal biology).

Required Credits

A total of 72 credits beyond the Bachelor's degree is required for the CSD PhD program. Up to 30 graduate-level credits (2000- and 3000-level courses; e.g., from a Master's program) can be transferred to your PhD program, and up to 12 additional credits may be transferred for work beyond the Master's degree (e.g., from another PhD program). Students must take at least 36 of these 72 credits while enrolled as a PhD in SHRS. *Most students take far more than this 72-credit minimum*.

Credits may be transferred using the Credit Transfer form, available on the SHRS Current Student: Forms site (at https://www.shrs.pitt.edu/current-students/forms). Transcripts and course descriptions must be submitted for each course for which transfer credit is requested. Please note: if you transfer credits it will shorten the maximum time that you are allowed for completing your degree, from 10 years to 8 years.

Courses outside CSD

1. *To identify courses outside of the CSD department*, talk to your fellow students and consult the CSD PhD student shared resources.

2. Full-time graduate students at the University of Pittsburgh are eligible to *cross register for graduate courses* during the fall and spring terms, at Carnegie Mellon University (CMU), Duquesne University, the Pittsburgh Theological Seminary, and Robert Morris College, without paying tuition to the host institution. The SHRS Registrar is the contact person for the cross-registration process; for all such cross-registrations, you will need to complete and submit a Pittsburgh Consortium for Higher Education (PCHE) form, available from the SHRS Current Student: Forms site (at https://www.shrs.pitt.edu/current-students/forms).

3. While not required, coursework in *teaching and grant preparation*, and *teaching practica*, are strongly recommended. These are bedrock skills that practicing faculty and researchers need to have. **CSD and SHRS are currently working on developing regularly-offered grantwriting courses; a PhD-level grantwriting course focused on F31s was offered in CSD during the 2020-2021 academic year**.

4. In addition, PhD (Doctor of Philosophy) students are recommended to *take a course in the History and/or Philosophy of Science*. The University of Pittsburgh has a world-class faculty and program in this area.

CSD PhD Milestones: Pre-Dissertation Project and Research Practicum Credits

Pre-Dissertation Project
The pre-dissertation project is a <u>mentored research project</u>, directed by the student's mentor. It must involve <u>identifying and answering a novel research question</u>, and it should provide students with exposure to <u>key domain-specific research methods and/or scientific literature</u>. The project *may involve collection of novel data or novel analysis of existing data*. The exact nature of the pre-dissertation project will be determined by PhD students and their mentors and may vary significantly between students. This project supports achievement of four core CSD PhD competencies: 1a, *Specialized training*; 2a, *Analytical methods*; 2b, *Research conduct*; and 4b, *Management and leadership*.

<u>Timeline and coursework associated with the pre-dissertation project</u>
Students typically begin planning their pre-dissertation project while they are taking Introduction to PhD Studies (CSD 3048), in the spring semester of their first year. Students should complete their pre-dissertation project **during the second year of their program**. They should <u>register for research practicum</u> (CSD 3971) during each term they are working on their pre-dissertation project.

<u>Research Practicum credits</u>
Students will <u>receive a Research Practicum grade</u> in each semester they are working on their pre-dissertation project. Research Practicum credits graded 'Unsatisfactory' (U) will *not count toward satisfying the pre-dissertation project coursework requirement*. Two U grades for Research Practicum will result in <u>re-evaluation of that student's admission to the program</u>. In this instance, the student's mentor, Plan of Study committee, and the department head will meet to consider appropriate actions.

<u>Project evaluation</u>
The director of the pre-dissertation project (the student's mentor) will both <u>approve the topic selected for the project</u> and <u>evaluate the final product</u>. The pre-dissertation project should <u>culminate in a manuscript potentially suitable for publication</u>. *Students may not begin comprehensive examinations until the pre-dissertation manuscript is reviewed and approved by their mentor*. Once a student's project has been accepted by their advisor, they must submit a Pre-Dissertation Project Approval Form to the CSD Academic Affairs Administrator. Please contact the Administrator for Academic Affairs, Laura Martin (lmm322@pitt.edu), who will prepare a DocuSign version of this form for the student and advisor to complete and sign.

Research Practicum, Teaching Practicum, and Directed/Independent Study Credits
As noted above, students are expected to enroll in research practicum each semester they are working on their pre-dissertation project. For each term that students register for research practicum or any other non-didactic learning experience (i.e., directed or independent studies; teaching practica; dissertation credits), they must <u>develop a contract</u> with their advisor that specifies the requirements for a "Satisfactory" grade. The information in the contract needs to be specific enough to ascertain whether they are meeting appropriate objectives. New contracts are formulated each term that the work continues, and in the case of continuing experiences (e.g., research practica related to the pre-dissertation project; dissertation

credits; work in related labs), these contracts must be sufficient to illustrate that the student is making good progress. Both the student and the director of the teaching/research practicum or directed/independent study should keep a record of these contracts. Students will receive a grade of satisfactory/unsatisfactory each term.

An "Incomplete" grade can be given, but this is reserved for situations where the mentor determines that a relatively short remediation or completion of a task would be sufficient to change the grade to "Satisfactory." In this case, the mentor and the student should formulate a contract clearly stating what needs to be achieved to change the grade to "Satisfactory." See discussion under "I and G Grades" above for timelines and procedures related to resolving an "Incomplete" grade. If the remediation is not completed by the relevant deadline, a grade of "Unsatisfactory" will result.

CSD PhD Milestones: Comprehensive Examinations
Goals
The *goal* of the PhD comprehensive exam process (comps) is to provide students a formative experience in: (a) exploring a research literature of their choosing in depth, (b) synthesizing that literature, and (c) identifying open and important theoretical and empirical questions. This process supports achievement of two CSD PhD core competencies: 1a, *Specialized training*, and 1c, *Theoretical grounding*. The deliverable emerging from the comps process should inform the student's dissertation prospectus and may also serve as the basis of grant submissions (such as F31 or other dissertation fellowships) and/or journal submissions. The written deliverable and the oral defense also provide opportunities for students to demonstrate achievement of CSD PhD core competency 2c, *Scientific communication*.

Prerequisites
Prior to beginning the comprehensive exam, students must complete: (a) all required coursework for the CSD PhD program (see Coursework Requirements) and (b) their predissertation project, as approved by their mentor (see Pre-Dissertation Project).

Process
Overview: The PhD comps involves a semester-long independent exploration of chosen literature, framed by questions proposed by the student and reviewed and approved by the student's comps committee. The comprehensive exam results in a written deliverable, a comprehensive literature review, and culminates in an oral exam and defense of this deliverable.

Steps:
a. The student identifies areas of interest, in consultation with their mentor.

b. Together with their mentor, the student forms a comps committee. The committee must include at least 3 Pitt graduate faculty (https://www.provost.pitt.edu/graduate-faculty-roster). At least 2 comps committee members must have primary appointments in CSD.

c. Together with their mentor, the student identifies comps questions and composes a comps outline (background and motivation for questions; specific questions; associated readings).

d. The student <u>convenes a comps committee meeting</u>, where the outline is presented to the comps committee and the committee provides feedback on questions and outline. The comps committee either approves the outline or requests revisions.

e. Once the outline is approved, the student <u>works for one semester</u> to complete the process, registering for CSD2972 during the semester they are working on comps. They should <u>complete both the written deliverable and the oral exam during this semester</u>. If the student is unable to complete the process in one semester, they must take an Incomplete and register for another semester of CSD 2972. See Timeline below for more detail regarding the timeline for completion of the deliverable and the oral exam.

Written deliverable and oral exam

a. <u>Critical review and evaluation of the literature</u>
Content: This written review should: synthesize existing research; evaluate its quantity and quality; identify critical gaps in knowledge; and identify key unanswered questions emerging from this review. The focus of this review should be on synthesizing the literature and developing well-motivated research questions, rather than on proposing specific experiments or methods that may answer those questions. Proposing specific methods and experimental approaches should be part of the dissertation prospectus.

Format: The format of this deliverable is flexible and will be determined by the student and the comps committee. Examples of potential formats for this deliverable include a systematic or scoping review appropriate for submission to a peer-reviewed journal (such as *American Journal of Speech-Language Pathology*, *Topics in Cognitive Science*, *Psychonomic Bulletin and Review*), an expanded version of the Background and Significance section for an F31 or other dissertation-fellowship grant (such as the SHRS Dissertation Grant), or a set of three to five 4- to 8-page essays (as in traditional PhD comprehensive exam processes, like that of the SHRS Rehabilitation Science PhD program).

Process: The writing of the literature-review deliverable should be a <u>student-driven process</u>, with the student working independently but able to ask questions of the mentor and committee regarding the structure and direction of the review while they are working on it. The mentor or committee members may not provide edits to the written deliverable prior to its being submitted to the committee. However, the mentor may provide feedback on whether the deliverable's writing is of suitable quality for submission to and evaluation by the committee.

b. <u>An oral exam</u>, consisting of an oral presentation and defense of the written deliverable and questions from all members of the committee. The goal of this oral exam is for the student to demonstrate intellectual independence, successfully answer critical questions regarding their work, and successfully present their work orally.

Timeline
<u>Students should complete comps in one term</u>. They must register for CSD 2972 while they are working on comps. Students must complete a learning agreement for CSD2972 together with their mentor (comps committee chair) and submit it to CSD Academic Administrator Laura Martin. The comps committee chair must award the student a grade of S, U, or I, based on whether they have successfully

fulfilled the goals and objectives in the learning contract. If the student is unable to complete the process in one semester, they must receive an I (Incomplete) grade and register for another semester of CSD 2972. Two semesters is the maximum number of semesters that students can register for comps. Failure to complete the comprehensive exam requirements by the end of the second term will be considered lack of adequate progress in the PhD Program. Students who are identified as not making adequate progress may be dismissed from the PhD program.

Steps to Satisfy Requirements for Comprehensive Exams:

First, the student must identify a planned oral exam date during the term they are working on comps. The oral defense must be scheduled no later than the day that grades are due for that term.

The student must complete and submit the literature-review written deliverable to the committee. This written deliverable must be submitted at least 3 weeks before the planned oral exam date.

The committee has 2 weeks to review and grade the written deliverable. Each committee member will submit a pass/fail grade for the deliverable to the committee chair. They must submit grades to the committee chair no later than one week before the planned oral exam date.

If the student receives a failing grade on the written deliverable from any committee member, they do not proceed to an oral exam. They will receive a U for CSD2972 and will be allowed one opportunity to rewrite the failing deliverable. The student must register for another semester of CSD 2972 and must complete the revision and subsequent oral defense within that semester. The committee may provide the student with feedback on the unsuccessful written deliverable prior to their starting on the revision.

If the student receives a failing grade on the oral exam from any committee member, they will receive a U for CSD2972 and will be allowed one opportunity to re-do the oral exam. The student must register for another semester of CSD 2972 and must complete the second attempt at the oral defense within that semester.

Following the oral exam, the student must report the results of the exam to the CSD Office of Academic Affairs using the Report on Examinations for the Doctoral Degree form. *Please contact the Administrator for Academic Affairs, Laura Martin (lmm322@pitt.edu), who will prepare a DocuSign version of this form for your comprehensive exam committee to complete and sign*.

CSD PhD Milestones: Dissertation Research

Overview: Nature and Scope of Dissertation Research
The dissertation involves theoretically-motivated, original, independent research. The dissertation should be grounded in an appropriate body of literature to address questions of theoretical and/or clinical significance. It should furthermore make a novel scholarly contribution, in which specific hypotheses are tested and/or specific research questions are answered. Dissertation research should culminate in a comprehensive final document that makes a significant contribution or advancement in the relevant literature base. Successful completion of the dissertation process supports achievement of multiple CSD PhD core competencies: 1c, *Theoretical grounding*; 2a, *Analytical methods*; 2b, *Research Conduct*; and 4b, *Management and leadership*. The writing and oral defense of both the prospectus and the dissertation

provide critical opportunities for practice relevant to CSD PhD core competency 1c, *Scientific Communication*.

Students must motivate their proposed dissertation work through a thorough review of the relevant literature. They must propose specific research methods that will address their dissertation aims, answer their research questions, and/or test the hypotheses they have posed. The dissertation proposal (prospectus) will be approved by your dissertation committee at the dissertation overview (prospectus) meeting. There is significant flexibility regarding what constitutes an appropriate topic and set of research questions, as well as what research methods will be used (e.g., whether prospective data collection or retrospective data analysis is best suited to answer the research questions; whether 1, 2, or more studies are required to test the hypotheses motivating the work). The student's dissertation committee is responsible for reviewing and approving all decisions regarding the scope and nature of the proposed dissertation work. If desired, the student or their advisor may consult the PhD program director for guidance regarding the scope or nature of the proposed work.

Per University guidelines, approval of the dissertation proposal does not imply either the acceptance of a dissertation that follows this proposal, or the restriction of the dissertation to this original proposal. The final dissertation project may differ from the work laid out in the prospectus, pending approval by the dissertation committee.

Dissertation Committee
In consultation with their advisor, students will select a dissertation committee of at least 4 people, including at least 1 from another department at the University of Pittsburgh outside of SHRS, or from an appropriate graduate program at another academic institution. (The committee may or may not include the same faculty members as the student's plan of study or comprehensive examination committees). The majority of this committee, including the major advisor, must be full or adjunct members of the Graduate Faculty. This committee will review and approve the proposed dissertation research, advise the student during the dissertation research process, approve revisions to the planned work, conduct the dissertation defense, and determine whether the dissertation meets accepted standards.

To receive approval for a dissertation committee, the student and their advisor must complete and submit a CSD Dissertation Committee Approval Form. Please contact the CSD Academic Affairs Administrator, Laura Martin (lmm322@pitt.edu), to request this form. Once this form is completed, it will be sent to the CSD PhD Program Director, CSD Department Chair, and Associate Dean for Graduate Studies for review and approval. The Associate Dean for Graduate Studies will provide written notification of committee approval. The dissertation committee must be approved before students can schedule a prospectus defense.

If a student's area of dissertation research requires the expertise of a director who has a secondary or adjunct appointment in SHRS, *the student must have a co-director whose primary appointment is in CSD*.

Dissertation Proposal (Prospectus) Meeting
Students must prepare a written dissertation proposal that they will provide to their dissertation committee, and present to them orally at a formal dissertation proposal (prospectus) meeting. *Students are responsible for*: (a) scheduling the meeting, (b) making sure that committee members have sufficient time to read your written proposal before the meeting, and (c) contacting the CSD Academic Affairs Administrator to request two sets of forms:

1. The Report on Examinations for the Doctoral Degree, indicating whether the student has passed or failed the defense. <u>It will be shared with the committee following the defense</u>.
2. Section 1 of the Middle States Outcomes form (Prospectus). <u>The Middle States form lists the minimal criteria by which your performance will be evaluated by your committee</u>. *It must be shared with dissertation committee members before the defense*, so that all committee members are aware of the criteria used to evaluate CSD PhD dissertation prospectuses.

Following the meeting, the Academic Affairs Administrator will generate DocuSign versions of both these forms for your dissertation committee to sign.

The <u>dissertation committee must unanimously approve the proposed topic and research plan</u> before the student can proceed with the proposed research. They may require revisions before approving the proposed research. If the research will involve human subjects or animals, it must be approved by the appropriate institutional review board(s) (IRB[s]) or institutional animal care and use committee(s) (IACUC[s]) before it can be carried out.

Dissertation Authorship Agreement Form
According to SHRS policy, all dissertation proposal defense approval forms require an authorship agreement component. This form is intended to ensure that the student and her/his dissertation committee members have discussed and are in agreement on who will receive author credit on any publications resulting for the dissertation. The authorship agreement form (available here: https://www.shrs.pitt.edu/sites/default/files/library/documents/phdrs/DISSERTATION%20PROPOSAL%20and%20AUTHORSHIP%20APPROVAL%20FORM.pdf) should be submitted to the CSD Academic Affairs Administrator, Laura Martin. *Please be advised that dissertation proposal approval forms that do not include the authorship agreement will not be accepted, and a dissertation proposal will not be considered approved until the authorship agreement has been received*.

Admission to Candidacy for the Degree of Doctor of Philosophy
Once your dissertation prospectus has been approved, you are eligible to be admitted to candidacy for the PhD degree. Admission to candidacy constitutes a promotion to the most advanced stage of graduate study and provides formal approval to devote essentially exclusive attention to the research and the writing of the dissertation. *After you pass your prospectus defense, please contact the CSD Academic Affairs Administrator, Laura Martin (lmm322@pitt.edu), to request the CSD PhD Admission to Candidacy form. She will generate a DocuSign version of this form for you to complete*. It will then be submitted to the CSD Department Chair and Associate Dean of Graduate Studies for approval. You will receive written notification from the Dean of your admission to candidacy.

Registering for Dissertation Credits and for "Dissertation Only" Status
While you work on your prospectus, and until you are admitted to candidacy, you need to register for CSD 3000 (dissertation credits). After you have been admitted to candidacy and while you are working on your dissertation, you may register for full-time dissertation study (FTDI 0000). In this status, you will not be charged the usual (per credit) tuition rate, and will only pay a flat fee for tuition each fall and spring term. No letter grade or credits are associated with this status. You must consult with the SHRS registrar for permission to register for full-time dissertation study. *Note that you must remain in active status* (see

below) while you are working on your dissertation, and that you must create a contract with your mentor each term (as detailed in the section on Pre-Dissertation Research and Research Practicum Credits).

Dissertation Format
There is significant flexibility in the format for dissertations. The <u>traditional format</u> used by CSD faculty and PhD students commonly involves a single long introductory chapter, a combined methods chapter (in which all research methods are presented together, in a single chapter), a combined results chapter (in which all results, across different methods, are presented together), and a combined discussion chapter. An <u>alternative (optional) format</u>, already approved at the SHRS level and commonly practiced elsewhere, involves a 2- or 3-paper format. The structure for such a dissertation format is as follows:

> Chapter 1: Aims of the thesis (a brief, high-level statement of the domain of interest and the key questions motivating the proposed work)
> Chapter 2: Theoretical chapter: Literature review and specific research questions (review being sufficiently comprehensive to motivate the research questions, as determined by the dissertation committee)
> Chapters 3-4/5: Empirical chapter(s): Individual studies formatted for submission to a peer-reviewed journal, with detailed introductions and methods, and study-specific discussion and conclusions
> Chapter 6: General discussion: Synthesis of findings across studies, identifying substantive conclusions and directions for future work

If approved by the student's dissertation committee, one or more chapters of the dissertation may be already-completed work, *provided that work is clearly aligned with the dissertation topic*. However, at least one chapter **must** reflect work that is novel to the dissertation.

Dissertation Submission Requirements: ETD
Dissertations are submitted in electronic format. You will find information regarding Electronic Theses and Dissertations (ETD) Formats and Guidelines at the SHRS ETD site, including links to ETD templates, here: https://www.shrs.pitt.edu/etd-electronic-thesis-and-dissertation.

When you are ready to apply for graduation, email Assistant to the Dean of Graduate Studies, Courtney Fleck, Courtney.fleck@pitt.edu, to obtain an electronic ETD packet. *Follow the instructions in that packet to the letter*.

The University Library System has migrated to D-Scholarship@Pitt (http://d-scholarship.pitt.edu/) for ETDs. This system is easy to use and has many features to improve access, sharing, and visibility of Pitt ETDs.

Dissertation Defense/Final Oral Examination
The final oral examination in defense of the doctoral dissertation is conducted by the dissertation committee and need not be confined to materials in and related to the dissertation. Anyone within or outside the University may attend and participate in selected portions of the examination. The details of the examination must be published for the broader university community well in advance of the examination.

Please note that the oral defense date will not be approved without identification of the moderator (who will run the defense meeting) and without the moderator's agreement to serve in that capacity. *The dissertation defense is directed by the moderator, a graduate faculty member who is not on the committee.* Please see the description of the moderator, their responsibilities, and the conduct of dissertation defenses in SHRS in Appendix A for more details.

<u>At least one month in advance of your scheduled dissertation defense</u>, students must:

1. Reserve a room - See the Setting Up Defense section at the following link: https://www.shrs.pitt.edu/etd-electronic-thesis-and-dissertation

2. Create a dissertation defense announcement using the following survey; this notifies the Assistant to the Associate Dean of Graduate Studies, Courtney Fleck, of the dissertation defense https://pitt.co1.qualtrics.com/jfe/form/SV_9GNEb6ainLQ70hL

3. Email the CSD Academic Affairs Administrator, Laura Martin, with their defense date (LMM322@pitt.edu)

<u>Students are also responsible for</u>: (a) making sure that their committee members have sufficient time to read your written proposal before the meeting, and (b) contacting the CSD Academic Affairs Administrator to request three sets of forms:

1. The Report on Examinations for the Doctoral Degree, indicating whether the student has passed or failed the dissertation defense. <u>It will be shared with the committee following the defense</u>.
2. Section 2 of the Middle States Outcomes form (Dissertation). <u>The Middle States form lists the minimal criteria by which your performance will be evaluated by your committee</u>. *It must be shared with dissertation committee members before the defense*, so that all committee members are aware of the criteria used to evaluate CSD PhD dissertation prospectuses.
3. The ETD Approval Form, indicating that the dissertation committee has approved the final version of the dissertation document (or cedes final approval of the document to the dissertation committee chair).

Following the meeting, the Academic Affairs Administrator will generate DocuSign versions of these forms for your dissertation committee to sign.

Only the members of the dissertation committee and the moderator may be present during the final deliberations and only the dissertation committee may vote on passing of the candidate. If the decision of the committee is not unanimous, the case is referred to SHRS Associate Dean for Graduate Studies for resolution.

Streaming of dissertation defenses from Forbes Tower is permitted. It is the student's decision whether or not to stream the defense presentation: streaming will not be allowed without the student's permission. Anyone wishing to stream the dissertation defense should make certain they reserve a room for the defense where this is feasible. The link to participate online should be included in the dissertation defense announcement. We recommend you work with SHRS IT Support (Kip Ruefle: kruefle@pitt.edu) in planning the set up for streaming a few weeks in advance of the dissertation date.

Procedures for Requesting Exceptions to CSD PhD Program Requirements
Any request for an exception to policies and procedures laid out above must be made in writing to the PhD Program Director. The student and mentor should prepare a formal memo, to be sent from the mentor to the PhD Program Director, documenting the specific exception being requested, laying out the reasons for the exception, and describing a specific plan of action. The PhD Program Director will review the request, consulting with the student, mentor, and SHRS Associate Dean for Graduate Studies as needed. If the request is approved, the PhD Program Director will send a memo approving the request along with the original memo from the student's mentor to CSD Academic Affairs Administrator Laura Martin, who will file both memos in the student's advising folder.

POLICIES OF THE CSD PhD PROGRAM: GRADING POLICIES

I and G Grades
In some circumstances, a student will be unable to complete all of the requirements for a given course (didactic/classroom course, research or teaching practicum, directed or independent study, or comps course) by the end of the term. In these cases, the student will receive either an Incomplete (I) or a G grade for the course, and must complete remaining requirements within a set period of time.

I Grade
An I grade will be assigned for incomplete class work. This work could be an incomplete assignment in a traditional didactic course, or it could be incomplete research work in a research practicum or seminar or an independent study, or failure to complete PhD comps during the semester a student is registered for CSD2972. The course instructor will have discretion in determining when to assign an I grade.

Incomplete grades should be completed *no later than the end of the following term*. If the incomplete grade is assigned for a course taken in the fall term, the work must be completed by the end of the spring term. If the incomplete grade is given in the spring, it is expected to be completed by the end of the summer term in August.

If an I grade is assigned, the student and instructor must fill out and submit a Completion Agreement for an I Grade and submit it to the CSD administrator. S/he will transmit a copy to SHRS Student Services and to the CSD PhD program director. The Completion Agreement form can be found at the SHRS Current Student: Forms site, https://www.shrs.pitt.edu/current-students/forms.

G Grade
A G grade should only be issued for classwork unfinished because of extenuating personal circumstances (e.g., a medical issue, a family situation). It is the responsibility of the faculty member to clearly state to the student the expected due date.

When given a "G" grade, the student should be instructed to complete some clearly defined work (e.g. a final examination paper) within a specified period of time. The "G" must be completed *no later than one year after the term or session in which the class was taken*. A student should not request or be given a "G" grade if, in actuality, they need to repeat the course. Once the deadline has passed, a "G" grade will remain on the students record and they will be required to register for the class again, if the class is needed to fulfill requirements for graduation.

If an I grade is assigned, the student and instructor must fill out and submit a Completion Agreement for an I Grade and submit it to the CSD administrator. S/he will transmit a copy to SHRS Student Services and to the CSD PhD program director. The Completion Agreement form can be found at the SHRS Current Student: Forms site, https://www.shrs.pitt.edu/current-students/forms.

POLICIES OF THE CSD PhD PROGRAM: IMPAIRED STUDENT POLICY

The CSD PhD program and School of Health and Rehabilitation Sciences (SHRS) have the responsibility to educate students to be responsible professionals prepared to provide quality services. Whether in the classroom, the clinical setting, a conference/meeting, or a research setting, students are expected to demonstrate professional behaviors aligned with respective Scopes of Practice, Codes of Ethics, and Technical Standards.

Safety is a critical component in the classroom, the clinical setting, and the research setting. The utmost responsibility of the University, the School, and the faculty is the protection and well-being of individuals in the classroom, the clinical setting, and in research, all of which supersedes the educational needs of the student to participate in a degree program.

When a student's psychological and/or physical condition has impaired their ability to participate and perform in the classroom, clinical setting, and/or research, the student will be asked to leave the area. As discussed below, the student will be given the opportunity to hear the reasons for the removal, to discuss the incident with a representative from the school and participate in a treatment plan if appropriate. Any expenses incurred because of assessment, treatment, transportation, and monitoring are solely the responsibility of the student.

The existence of a health or personal problem for a student is NOT synonymous with impairment under this policy.

In addition to this policy, the University of Pittsburgh has developed resources to assist faculty and staff with distressed students. The Faculty and Staff Guide to Helping Distressed Students is available as well as this document from Student Affairs.

When a partner site has a policy regarding fitness for duty, that policy will be followed in addition to the School of Health and Rehabilitation Sciences policy.

Purpose
This Policy is designed to:
- Identify and adequately address the needs of students with impairment
- Enhance awareness among faculty and students of the typical characteristics of an impaired student to identify students in need of help
- Protect patients from risks associated with care given by an impaired student
- Promote educational programs and other methods of primary prevention of impairment of all students

- Provide a mechanism for a fair, reasonable and confidential assessment of a student who is suspected of being impaired, including the development of a plan to address the student's academic progress
- Take administrative actions as necessary

Definitions

For the purposes of this policy, impairment is defined as a physical or mental condition, substance abuse, chemical dependence or any other circumstances that interferes with the student's ability to engage safely in patient care or clinical practice.

Reporting Possible Impairment

a. Self-reporting - Any student who is concerned that they might be impaired or likely to become impaired should contact their respective Program Director to formulate a plan of action to secure appropriate assistance and resources.

b. Report by others - Any person (e.g., student, faculty, staff, clinical partner, or administrator) who has reasonable cause to suspect that the ability of a student to safely perform their clinical duties may be impaired shall, in good faith, report the student to the respective Program Director.

c. If a report is determined to be made in bad faith or malicious, the reporting party will be identified to the Dean and may be subject to action under applicable institutional policies and/or laws and regulations.

Process

a. When there is concern that a student is impaired, a faculty member may remove the student from the applicable area. The student shall be informed of temporary suspension from clinical practice. If warranted by the student's condition, the clinical instructor, campus security, or a representative from the school may accompany the student to the nearest healthcare facility for emergency treatment.

b. When there is concern that a student poses a risk of harm, an immediate referral will be made to an appropriate service provider. If the behavior has occurred in the classroom, clinic, or research setting, the student will be temporarily removed from that setting.

c. Faculty involved in the identification of a possible impaired student must initially meet with the student and/or person who is reporting the student.

d. A subsequent meeting(s) will occur between the student, faculty involved in the identification of the problem, and Program Director. The documented and observable evidence of impaired performance will be reviewed with the student, and the student will have an opportunity to provide an explanation.

e. One representative from the University community chosen by the student may accompany the student to any meeting but they may not stand in place of the student during the discussions. Such representative may not be legal counsel.

f. During the meeting(s) an individualized plan will be discussed and developed with the student that considers the impact of the student's behavior on the safety of the environment. During the meetings(s) the student may be asked to sign an Authorization for the Disclosure of Protected Health Information and may submit relevant medical records from their treating

physician. If the student agrees with the recommended plan, the student will proceed with implementation.

g.   If agreed to, the student must seek and select a treatment provider when recommended by the Program Director in a timely manner (not more than 2 weeks). Costs of treatment will be the student's responsibility.

h.   If the student has been referred for treatment, the student will be permitted to return to practice only on the specific recommendation of an appropriate treatment provider that the student is capable of safe and skilled performance in accordance with School or Programs Scopes of Practice, Codes of Ethics, and Technical Standards.

i.   The student has the right to refuse this assessment, treatment, and further monitoring. In which chase the student may file an appeal [see link below].

j.   The school may not permit a student to return to practice without certification from a recognized healthcare provider that he/she has completed treatment, is undergoing treatment, or does not need treatment, and is fit for duty.

Monitoring

a.   The student successfully completing the treatment period will be monitored by the Program Director or faculty designee for progression in the degree program.

Leave of Absence and Re-entry

a.   An impaired student will be allowed a leave-of-absence in accordance with the policy outlined in the SHRS Student Handbooks.

b.   If the student requests a medical leave-of-absence, procedures for the leave and re-entry will be followed as outlined in the SHRS Student Handbooks.

Unresponsiveness to Intervention

a.   If the student does not responsibly cooperate or respond to the plan created by the Program Director or faculty designee, the student may be required to take a leave of absence, be suspended, or be dismissed. Students can appeal this decision using the SHRS appeals process

Confidentiality

a.   Confidentiality for every student is to be maintained throughout the process consistent with the University's FERPA Policy and Procedure.

File

a.   All files will be kept by the student's respective department/program after the student graduates in accordance with university policy.

POLICIES OF THE CSD PhD PROGRAM: OTHER REQUIREMENTS RELATED TO THE CONDUCT OF RESEARCH

Research Training
Anyone involved in conducting research at the University of Pittsburgh must complete on-line training in the ethical conduct of research, as well as human subjects protections and privacy requirements and/or animal subjects protections. It is recommended that you complete this training as soon as possible after you register for the first time. Evidence of certification must be submitted for various purposes at

departmental, school, and University levels. Information about the Research Practice Fundamentals education and an overview of the certification program can be found at www.rcco.pitt.edu. For an overview and access to the required training modules, go to http://www.hrpo.pitt.edu/training.

The University has also established a Responsible Conduct of Research (RCR) Training Center through its Clinical and Translational Science Institute (CTSI: https://ctsi.pitt.edu/education-training/responsible-conduct-of-research-training/) for the purpose of helping students, postdocs, and faculty meet the NIH RCR requirements. The workshops are all noncredit, free, and conducted in person. Dr. Karen Schmidt is the director of the Center and she can help you design an RCR plan and provide text for your grant application. Please feel free to contact her at kschmidt@pitt.edu.

Human Research Protection Office (HRPO) Approval for Research Involving Human Subjects
Before any research can be conducted with human subjects, IRB approval is necessary. Institutional Research Boards (IRBs) are federally-mandated bodies that function to protect the rights and welfare of human research participants. Federal policy defines "research" as "a systematic investigation, including research development, testing, and evaluation, designed to develop or to contribute to generalizable knowledge." At Pitt, the Human Research Protection Office (HRPO) is responsible for both IRB oversight and compliance, as well as education in the ethical conduct of research.

You are encouraged to allow plenty of time to prepare your materials for IRB submission and review. IRB regulations and requirements are quite precise, and thoroughly detailed in the aforementioned manual and other documents on the Human Research Protection Office (HRPO) website (http://www.hrpo.pitt.edu/). When you are preparing your IRB submission, you need to read these materials carefully. The HRPO also sponsors periodic "Ask the IRB" sessions to help investigators navigate the process, and HRPO staff typically are easily available for specific questions, as well. To receive ongoing updates about regulatory information and other news of concern to the University of Pittsburgh research community you can join the University of Pittsburgh HRPO e-mailing list at the above website.

The Pitt HRPO currently has cooperative IRB agreements with Children's Hospital of Pittsburgh, Magee Women's Hospital, and the VA Pittsburgh Healthcare System. The Preface of the IRB Reference Manual spells out what each of these agreements means for IRB review.

Pre-IRB submission: SHRS Scientific Review Approval
Before they can be submitted for IRB approval, all research proposals that involve human subjects are required to be reviewed by "an appropriate and formally constituted scientific review committee" (Guidelines for Structure and Function of Scientific Review Committees, November, 1998). Prior scientific review can be accomplished by any of a number of units throughout the university, or by federal peer-review panels in the case of a federally-funded grant application. In SHRS, Scientific Review clearance is handled within each department. After the investigator uploads the IRB materials into PittPRO (a web-based system for scientific review approval, https://www.pittpro.pitt.edu/) the appropriate departmental reviewer is notified to initiate the review. (Note: your research advisor will be notified to approve your IRB documents in PittPRO, before notice is sent to the scientific reviewer. It may be wise to alert your advisor to this pre-review requirement, so that your proposal can be processed in a timely manner).

Institutional Animal Care and Use Committee (IACUC)
If your research involves laboratory animals, it must be reviewed by IACUC. For information, go to http://www.iacuc.pitt.edu/.

University Policy on Research Data Management
The required practice is found in Guidelines on Research Data Management, available at RDM_Guidelines.pdf (pitt.edu). Briefly, research data belong to the University of Pittsburgh, which can be held accountable for the integrity of the data even after the researchers who generated the data have left the University. Although the primary data should remain in the laboratory where it originated (and hence at the University), consistent with the precepts of academic freedom and intellectual integrity an investigator no longer in the laboratory may retain copies of the research data and certain materials created by him/her in the course of the research.

The University of Pittsburgh, as the grantee for sponsored research, has an institutional responsibility to retain research records for a minimum of seven years following the conclusion of a grant. As the policy states, the research records should remain in the laboratory where they were created. If that is not possible, the research records should be retained in the department or institute administrative office.

Please keep in mind that failure to accurately record and retain research data may be considered an act of research impropriety which falls short of the legal definition of research misconduct. However, such actions are nonetheless regarded very seriously by the University and the federal Office of Research Integrity.

Research procedures for students graduating from Pitt
Graduating CSD PhD students are required to complete the checklist for investigators leaving the University outlined here: https://www.orp.pitt.edu/resources/checklist-investigators-leaving-university

POLICIES OF THE CSD PhD PROGRAM: RESIDENCE, REGISTRATION, AND COMPLETION REQUIREMENTS

Residency Requirements
It is beneficial for most students to be full-time throughout their PhD program. However, in some instances students will have significant off-campus responsibilities. Therefore, with approval, the PhD can be completed by a combination of full-time and part-time study. All students must engage in a minimum of one term of full-time PhD study, which excludes any other employment except as approved by the department chair.

Active Status
To maintain status as an active student, SHRS requires that PhD students register for at least one (1) credit in each fall and spring term (unless on 'Dissertation only' status, which has no credits attached). Under exceptional circumstances (e.g., medical, death in the family) you may apply for a waiver of this requirement, with a letter of support from your advisor and for a compelling reason. Otherwise, if you will not meet the requirement to maintain active status, you must take a leave of absence. Readmission is automatic following an approved leave of absence (see more below). If you do not take a leave of absence in this circumstance, you will be placed on inactive status. This means you must file an application for

readmission to graduate study before you will be allowed to register. Upon readmission, your plan of study would be adjusted to meet PhD requirements at the time of readmission.

Minimum Grade-Point Average: Probation, Dismissal, Candidacy and Graduation.
PhD students are required to maintain a 3.0 grade point average. If your grade point average falls below a 3.0, you will be placed on academic probation. If you are on probation for 2 consecutive terms, the faculty may choose to dismiss you from the program. You must have a 3.0 grade point average to be admitted to PhD candidacy, and to graduate.

Statute of Limitations, Extensions, Leaves of Absence
Statute of Limitations and Extensions
From the time of initial registration, all requirements for the PhD must be completed within 10 years, or 8 years if you have received credits for completion of a Master's degree. Under exceptional circumstances, a candidate for the PhD may apply for an extension of the statute of limitations. This request must be approved by the department chair and the SHRS Associate Dean of Graduate Studies.

Leaves of Absence
Under special conditions, a student may be granted one leave of absence for a maximum of 2 years. The length and rationale for the leave must be stated in advance, recommended by the student's advisor, and approved by the department chair and SHRS Associate Dean for Graduate Studies. The time of the leave of absence does not count against the total time allowed for the degree. Readmission is automatic following an approved leave of absence. Students must file a formal request for a leave of absence; this can be found at the link below or at the SHRS Current Student: Forms site, https://www.shrs.pitt.edu/current-students/forms:

https://www.shrs.pitt.edu/sites/default/files/library/documents/students/Request%20for%20a%20Leave%20of%20Absence%20-%20Graduate.pdf

RESOURCES FOR THE CSD PhD PROGRAM

Funding Information and Opportunities

Financial assistance for PhD students is available from a variety of sources, including grant-funded graduate-student researcher (GSR) positions, PhD traineeships (affiliated with federally-sponsored training grants), and teaching assistantships. These typically require up to 20 hours of work per week and are typically compensated with either or both tuition remission and a stipend. Students may also apply for fellowships (such as NIH-sponsored F31 of NSF Graduate Student Fellowships, or CAPCSD or ASHA PhD Scholarships). *You should speak with your advisor and the CSD Director of Financial Aid to funding opportunities, and make plans for your funding support during your PhD program*. To find information about scholarship opportunities specific to SHRS students, go to the SHRS homepage (http://www.shrs.pitt.edu), and under the Current Students tab, click on Scholarships. If you have any questions, you can direct them to the CSD Director of Financial Aid (Dr. Jim Coyle).

Specific funding opportunities
- If you are eligible, you are encouraged to prepare an application for one of several categories of *pre-doctoral fellowships* (National Research Service Awards, F31 grants) from the National

Institutes of Health (NIH). These awards support dissertation research for PhD students who are US citizens or permanent residents of the US, and who will have successfully completed comprehensive exams by the time of the award. They also support PhD training for students from underrepresented racial/ethnic minority groups and students with disabilities.

F31 awards provide funding for research training and give you a start on an independent NIH funding record, which is important for future grant submissions and highly valued when you look for a job. A detailed proposal is required, and you will need to work closely with your research advisor to make sure your application meets standards of quality and completeness. The grants are competitive and you may need to revise and resubmit after receiving feedback on an initial submission. Successful applications are put on a fast-track, with the time from submission to funding being 4 months. For a program announcement that provides more information, go to https://researchtraining.nih.gov/programs/fellowships/F31. You can find information specific to the National Institute on Deafness and Other Communication Disorders (NIDCD) at http://www.nidcd.nih.gov/funding/types/pages/training.aspx#F31A . The NIDCD site will link to application forms and instructions, or you can go to the Fellowships category at http://grants.nih.gov/grants/funding/424/index.htm. You can also e-mail any questions you have to grantsinfo@nih.gov .

- SHRS has a small Research Development Fund, and graduate students are eligible to apply as principal investigator for grants up to $1000. Several smaller applications can be made as long as the total request does not exceed $1000. Applications for awards are available from the Dean's office.

- SHRS also awards the SHRS Doctoral Student Award, to provide funding to PhD students who have passed written comprehensive examination to support their research projects that are related to their dissertation research. Students can apply for up to $7500.00. There will be 2 application/review periods per year, early October and end of March. The application should include a coversheet, 1 page statement of specific aims, 5 page research plan, student biosketch, budget and budget justification. In the biosketch the student should indicate how their work is different from their advisor/mentor. Students will be notified via email approximately 90 days prior to the due date, with the RFA information.

- SHRS also provides some opportunities for student travel grants. Information at the following link describes these, provides a link to travel grant opportunities through the Graduate and Professional Student Association, and compares the two sources of travel awards. http://www.shrs.pitt.edu/student.aspx?id=291

- The following link provides a list of other financial aid resources that may be of interest to graduate students in the department: https://www.shrs.pitt.edu/financialinformation/. Additional information can be obtained from the University of Pittsburgh Office of Admissions & Financial Aid: https://financialaid.pitt.edu/ located in Alumni Hall.

- The website of the Office of Academic Career Development Health Sciences also contains information on funding opportunities for graduate students: http://www.oacd.health.pitt.edu/research-and-funding-medical-and-graduate-students

- The NIH has a Loan Repayment program for up to $35,000 per year of qualified educational debt. For details, see http://www.lrp.nih.gov.

PhD student representatives

The CSD PhD program has two student representatives to the faculty. <u>These representatives are key resources for PhD students</u>: they curate the CSD PhD student resources folder, coordinate formal and informal PhD student groups and communication (including Facebook groups, Slack channels, and email lists), they help welcome new PhD students each year as part of our annual orientation, and they serve as liaisons and points of contact between students and faculty. They may be contacted at csdphdreps@groups.pitt.edu.

CSD PhD student resources folder

The CSD PhD student representatives maintain a shared resources folder (currently hosted on Pitt Box). This contains a *wealth* of valuable information, including sample plans of study, annual reports, statistical resources, job application materials, even suggested sites and neighborhoods to visit. These uniquely valuable materials are frequently updated and are available to all CSD PhD students.

CSD Office of Research

Pitt CSD's Office of Research works closely with PhD students to support their research and training. CSD Research Administrator Tonya Martin (tmartin1@pitt.edu) works with PhD students on GSR positions and contracts, develops and administers grant budgets, facilitates participant payment and purchasing, and guides administration of awarded grants. CSD Research Administrator Katie Belardi (kmb326@pitt.edu) works with PhD students on identifying funding opportunities, partners in preparing grant submissions, coordinates with the PhD program director in planning and executing the Research Round Table series, meets regularly with PhD student representatives and the PhD program director, and facilitates requests for letters of support and other documents. The Office of Research site (https://www.shrs.pitt.edu/csd/research) also serves a key gathering point for information and resources for both student and faculty research. The Office also coordinates formal and informal communication related to CSD research (including social-media accounts and Slack channels).

SHRS Data Center

The SHRS Data Center provides statistical consultation to both CSD faculty and students in support of grant applications and student projects. Doctoral students wishing to consult with a statistician can request a meeting for a one hour consult (maximum three hours of consultation per project). Requests should be made through the SHRS Data Center Consultation Request form at the Office of Research website: https://pitt.co1.qualtrics.com/jfe/form/SV_6Yk5SOD8kn7tf0y

Students are responsible to conduct all work, including analyses and writing for the following:

- <u>Study design</u>: Students who have planned a study can request a meeting to discuss the appropriateness of the design with the MS statistician. The statistician will advise and provide alternate choices if the existing plan does not seem appropriate.

- Analytic plan: Students who have written an analytic plan can request a meeting with the MS statistician to discuss the appropriateness of the analytic plan. The MS statistician may be able to provide suggestions to improve the plan.

- Sample size estimation: Students requesting a consult about a sample size estimation should perform the power analysis prior to meeting with the statistician. The statistician can then review the estimation and provide any suggestions for improvement.

- Data Issues: Students with an existing data set can request a meeting with the statistician to ask about the appropriateness of the data structure, variable coding, missing data issues, and other data issues. The statistician will provide suggestions.

- Statistical programming: Students who have performed an analysis using SAS or R software can request a meeting with the MS statistician to discuss the appropriateness of the statistical program to yield appropriate results.

- Interpretation of results: Students who have performed an analysis may schedule a meeting to discuss interpretation of results with the statistician. The MS statistician can assist with interpretation of point estimates, confidence intervals, or other relevant statistical output. The results can be presented in tables, within a manuscript, or in a word document (copied from the statistical software program).

SERVICE AND LEADERSHIP OPPORTUNITIES FOR CSD PHD STUDENTS

CSD PhD core competencies 4a and 4b are *Professionalism and service* and *Management and leadership*. There are a number of opportunities for students to obtain important service and leadership experience during the CSD PhD program. Several of these are listed below.

RRT Programming and Organizing (2nd year PhD students)
Each academic year, the PhD Program Director and the 2nd year PhD student cohort organize and plan the year's Research Round Table, the research and professional-development series that co-meets with CSD 3060 (PhD Proseminar). During the summer following their first year, the rising 2nd year PhD students collaborate with the PhD Program Director and the Office of Research to select speakers to invite and professional-development activities to host. The students are responsible for inviting the speakers, introducing them at RRT, and coordinating with the PhD Program Director.

PhD student representatives
As noted above, there are two PhD student representatives to the faculty. These representatives are appointed for two-year terms, with the terms of the two representatives being staggered when possible. Their responsibilities include attending monthly faculty meetings, meeting regularly with the PhD Program Director and members of the Office of Research, and conveying information and concerns between PhD students and the PhD Program Director. Serving as a representative is a fantastic opportunity to gain service and leadership experience, improve the lives of CSD PhD students, and get involved in the life of the department. Students who are interested in being PhD student representatives should contact either the PhD Program Director or the current student representatives (csdphdreps@groups.pitt.edu).

Pitt CSD Podcast
The Pitt CSD Podcast is a PhD-student-run science communication initiative. It engages leading experts (drawn from Pitt CSD faculty and RRT speakers) in conversation regarding key scientific articles, making critical research findings accessible to clinicians and interested listeners. PhD students serve as the podcast hosts. They also coordinate the efforts of a team of undergraduate and MA-SLP/AuD students who support the podcast (editing and posting the recorded conversations). The podcast hosts are selected each year by the PhD Program Director and the faculty sponsor of the Pitt CSD Podcast, Dr. Leah Helou (lbh7@pitt.edu). *This role is a fantastic opportunity for PhD students to hone their skills in science communication, interact with leading researchers in the field, and be the face of Pitt CSD for a national listening audience*. Students who are interested in being Pitt CSD Podcast hosts should contact either the PhD Program Director of faculty sponsor Leah Helou (lbh7@pitt.edu).

APPENDIX A: SHRS Regulations on Final Oral Defense of the Doctoral Dissertation

The final oral examination in defense of the doctoral dissertation is conducted by the Dissertation Committee and need not be confined to materials in and related to the dissertation. The defense is overseen by a non-committee member moderator who is a member of the graduate faculty (responsibilities outlined below). Anyone within or outside of the University may attend and participate in selected portions of the examination. Although this is a public defense, it is strongly recommended that the Chair of the Committee discourage the student from including family and friends in the defense due to the potential for awkward interactions for the student and committee. No food or beverage will be provided by the student, committee members, or general audience for consumption by the group during the defense proceedings.

The date, place, and time of the examination should be published in advance in the University Times and the Pitt Chronicle. To provide this information to the SHRS Graduate School, the student must follow the procedures described under 'Setting up Your Defense' at following link: https://www.shrs.pitt.edu/etd-electronic-thesis-and-dissertation. These procedures must be completed at least one month before the defense date. An announcement of the Oral Defense will be posted on the Health Sciences Calendar website and the SHRS website, including the dissertation abstract (which will be provided as part of completing the procedures above).

Oral examinations are to be scheduled on the Oakland campus, preferably in Forbes Tower whenever possible. The room selected for the oral examination should provide adequate space and electronic resources to accommodate a large group of attendees. The room must accommodate 50 people or more if a larger attendance is anticipated. It is preferable for all committee members to be physically present during the examination but if a committee member is unable to attend the defense, electronic communication must be available in the room to allow for virtual attendance at least by voice. The majority of the committee must be physically present for the defense (e.g., 3 of 4, 3 of 5, 4 of 6, etc). The candidate, Chair of the Committee, and Moderator must attend the defense in person without exception.

The student and chair of the dissertation committee will secure the agreement of a non-committee member of the graduate faculty, from any SHRS department, to serve as moderator for the oral examination. This individual will moderate the timing of the meeting, the order of questioning, and ensure a consistent process for all students involved in dissertation defenses. Although only the Dissertation Committee participates in the deliberations and votes on the passing of the candidate, the moderator will serve as an observer through this process.

Once the dissertation defense has reached the deliberations stage, and all concerns have been addressed, the student will be asked to leave the room and the Committee will proceed with their deliberations and vote up or down regarding a passing grade for the dissertation. The moderator who is observing the proceedings is not a contributing or voting member of this committee. The student will then be invited back into the room and informed by the committee chair of the decision. If the decision of the committee on passing the oral examination is not unanimous, the case is referred to the Associate Dean of Graduate Studies as a mediator to pursue resolution (this is a University-wide policy).

Necessary changes will be explained to the student as needed to achieve the written format and content that is fully acceptable to the majority of committee members. During the proceedings, the Chair or a member of the committee designated by the chair will take notes to provide to the student, specifying all revisions that are required prior to submission of the final dissertation document. The Chair of the

Dissertation Committee will ensure that the dissertation is in final form before requesting signatures of the members of the committee. The ETD Approval form (included in the doctoral packet available in Student Services and at the link below), signed by all the members of the Dissertation Committee, must be sent to Student Services.

<u>Timeline for the dissertation defense:</u>

1. At least one month prior to the defense, the student must provide information regarding the defense to the SGRS Graduate School, by following the procedures described under 'Setting up Your Defense' at following link: https://www.shrs.pitt.edu/etd-electronic-thesis-and-dissertation.
2. At least two weeks prior to the defense, the Chair of the dissertation committee will secure the agreement of a non-committee member on the graduate faculty, from any department in SHRS, to serve as moderator of the oral examination. If the Chair cannot find a moderator, one will be appointed by the Associate Dean of Graduate Studies from the members of the SHRS Graduate Faculty.
3. The student will bring all necessary paperwork to the oral examination.

<u>Responsibilities of the Defense Moderator (non-committee member of SHRS graduate faculty):</u>
The moderator of the defense will welcome the group, read written guidelines, ensure adherence to the timing of the oral examination. The moderator will function as an independent observer to the process and will complete a checklist of activities for later review by the department Chair and Associate Dean to promote consistent and fair practices. If necessary, the moderator will remind faculty to allow the student to answer all questions independently.

A moderator script and checklist (to be used by the Defense Moderator to lead the defense proceedings) may be found here:

https://www.shrs.pitt.edu/sites/default/files/library/documents/students/2016/MODERATOR%20SCRIPT.pdf

This script can also be found by following the Dissertation Defense Moderator Script link at the SHRS Current Student: Forms site, https://www.shrs.pitt.edu/current-students/forms.