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BSPH and NIH FAES Academic Calendars

The vast majority of courses will be held according to the Johns Hopkins Bloomberg School of Public Health Academic Calendar. However, some classes that are cross-listed with the NIH Foundation for Advanced Education in the Sciences (FAES) are scheduled according to the FAES calendar. Courses following the FAES calendar are the following:

Medical Genetics and Genomic Medicine: From Diagnosis to Treatment I and II

Current Topics in Molecular Genetics (elective)

Introduction to Medical Genetics I and II (elective)

Both calendars follow.

BSPH Academic Calendar

1st Term	Monday, August 29 - Monday, October 24 (40 class days)

Registration Begins for 1st Term for Continuing Students & Special Students
Monday, April 11

Registration Begins for 1st Term for New Students
Friday, July 1

1st Term Registration Ends for all Students
Friday, August 26

NEW STUDENT ORIENTATION
Wednesday, August 24 - Friday, August 26

Instruction Begins for 1st Term
Monday, August 29

Add Period
Monday, August 29 - Friday, September 2

Drop Period
Monday, August 29 - Friday, September 9

LABOR DAY RECESS
Monday, September 5

Last Day to Make Schedule Changes for 1st Term (Course withdrawal deadline)
Monday, October 10

Last Day of Class for 1st Term
Monday, October 24

Grades Due for 1st Term
Friday, November 4

2nd Term	Wednesday, October 26 - Friday, December 23 (40 class days)

Registration Begins for 2nd Term
Monday, April 11

2nd Term Registration Ends
Friday, October 21

Instruction Begins for 2nd Term
Wednesday, October 26

Add Period
Wednesday, October 26 - Tuesday, November 1

Drop Period
Wednesday, October 26 - Tuesday, November 8

THANKSGIVING RECESS
Wednesday, November 23 - Sunday, November 27

Last Day to Make Schedule Changes for 2nd Term (Course withdrawal deadline)
Wednesday, December 9

Last Class Day of 2nd Term
Friday, December 23

Grades Due for 2nd Term
Tuesday, January 4*

**Grades for graduating students are due by Friday, December 23*

Winter Intersession	Wednesday, January 4 - Friday, January 20

Registration Begins for Winter Intersession
Monday, October 3

Registration Ends for Winter Intersession
Friday, December 30

Part-time/Online MPH NEW STUDENT ORIENTATION
Monday, January 3

Add/Drop Period and Last Day to Make Schedule Changes for Winter Intersession varies per course

MARTIN LUTHER KING, JR. RECESS
Monday, January 16

Grades Due for Winter
Friday, January 27

3rd Term

Monday, January 23 - Friday, March 17 (40 class days)

Registration Begins for 3rd Term
Monday, November 14

3rd Term Registration Ends
Friday, January 20

Instruction Begins for 3rd Term
Monday, January 23

Add Period
Monday, January 23 - Friday, January 27

Drop Period
Monday, January 23 - Friday, February 3

Last Day to Make Schedule Changes for 3rd Term (Course withdrawal deadline)
Friday, March 3

Last Day of Class for 3rd Term
Friday, March 17

SPRING RECESS
Monday, March 20 – Friday, March 24

Grades Due for 3rd Term
Friday, March 31

4th Term

Monday, March 27 - Friday, May 19 (40 class days)

Registration Begins for 4th Term
Monday, November 14

4th Term Registration Ends
Friday, March 24

Instruction Begins for 4th Term
Monday, March 27

Add Period
Monday, March 27 - Friday, March 31

Drop Period
Monday, March 27 - Friday, April 7

Last Day to Make Schedule Changes for 4th Term (Course withdrawal deadline)
Friday, May 5

Last Day of Class for 4th Term
Friday, May 19

PUBLIC HEALTH CONVOCATION CEREMONY
Tuesday, May 23

UNIVERSITY COMMENCEMENT CEREMONY
Thursday, May 25

Grades Due for 4th Term
Friday, June 2 *

RESIDENCY PROGRAM ENDS
Friday, June 30

** Grades for graduating students are due on the last day of the term*

NIH FAES Academic Calendar

Fall 2022 Term	**August 31 - December 13**
Open Registration	July 6 – August 26
'Session A' Courses Start and End	August 31 – October 19
'Session A' Courses Late Registration*	August 29 – September 2
'Session B' Start and End	October 26 – December 13
'Session B' Courses Late Registration*	October 24 – October 28

January 2023 Intersession	**January 11 – January 31**
Open Registration	November 16 - January 6
Intersession Courses Start and End	January 11 – January 31

Spring 2023 Term	**February 1 – May 16**
Open Registration	November 30 – January 27
'Session A' Courses Start and End	February 1 – March 21
'Session A' Courses Late Registration*	January 30 – February 3
'Session B' Start and End	March 29 – May 16
'Session B' Courses Late Registration*	March 27 – March 31

May 2023 Intersession	**May 24 – June 13**
Open Registration	March 22 - May 19
Intersession Courses Start and End	May 24 – June 13

Summer 2023 Term	
Open Registration	April 18 – June 10
'Session A' Courses Start and End	June 13 – July 29
'Session A' Courses Late Registration*	June 13 – June 17

Key Program Contacts

Program Leadership

Program Director:	Lori Erby, ScM, PhD, CGC	lori.erby@nih.gov 301-443-2635
Associate Director:	Megan Cho, ScM, CGC	megan.cho@nih.gov 301-655-4551
Associate Director of Cancer Genomics:	Leila Jamal, ScM, PhD, CGC	leila.jamal@nih.gov
Academic Director: (emeritus)	Debra Roter, DrPH	droter1@jhu.edu 410-955-6498
Academic Director:	Chenery Lowe, ScM, PhD, CGC	clowe7@jhmi.edu
Medical Director:	Chuck Venditti, MD, PhD	venditti@mail.nih.gov 301-496-6213

NIH Program Coordinator

Ellie Younger ellie.younger@nih.gov

For questions related to NIH, including but not limited to fellowship, travel, and research funding

BSPH-HBS Academic Program Administrator

L. Robin Newcomb rnewcomb@jhmi.edu

For questions related to Johns Hopkins, including but not limited to registration and financial aid

For Johns Hopkins campus questions specifically related to the JHU/NIH Genetic Counseling Training Program, you may also reach out to program faculty Chenery Lowe at clowe7@jhmi.edu

Office hours

Program Leadership hosts weekly virtual office hours. Students are encouraged to attend with questions or just to chat. Times may vary by quarter but will be posted on the shared Outlook Calendar under “All Years”.

JHU/NIH Genetic Counseling Training Program Executive Committee

NIH Faculty

Lori Erby, Ph.D., Sc.M., C.G.C., Program Director
Center for Precision Health Research, NHGRI
Megan Cho, Sc.M., C.G.C., Associate Director
Center for Precision Health Research, NHGRI
Leila Jamal, ScM, PhD., C.G.C, Associate Director for Cancer Genomics
Center for Cancer Research, NCI
Leslie Biesecker, M.D.
Center for Precision Health Research, NHGRI
Kathy Helzlsouer, M.D., M.H.S.
Division of Cancer Control and Population Sciences, NCI
William Klein, Ph.D.
Division of Cancer Control and Population Sciences, NCI
Donna Krasnewich, M.D., Ph.D.
Division of Genetics and Developmental Biology, NIGMS
Julie Sapp, Sc.M., C.G.C.
Center for Precision Health Research, NHGRI
Charles Venditti, M.D., Ph.D., Medical Director
Metabolic Medicine Branch, NHGRI

JHU Faculty

Debra Roter, Dr.PH (Emeritus Academic Director)
Department of Health, Behavior and Society, BSPH
Joann Bodurtha, M.D., M.P.H.
Department of Genetic Medicine, JHU
Julie Cohen, Sc.M., C.G.C.
Division of Neurogenetics, KKI
Cynthia James, ScM, PhD., C.G.C.
Department of Medicine, JHU
Howard Levy, M.D., Ph.D.
Department of Medicine, JHU
Chenery Lowe, PhD.
Department of Health, Behavior and Society, BSPH
Sara Neelon, Ph.D.
Department of Health, Behavior and Society, BSPH
Jill Owczarzak, Ph.D.
Department of Health, Behavior and Society, BSPH

JHU/ NIH GCTP Working Group

Oversight of the program occurs at three levels. Day to day implementation of the program is left to the Program Director, the Associate Director, and the Associate Director of Cancer Genomics at the NIH and the Academic Director at Johns Hopkins. The previously mentioned Executive Committee made up of advising and teaching faculty meets 5-6 times a year to manage admissions, thesis approvals, and to advise leadership on specific curricular changes and student concerns. Finally, we have a Working Group made up of 6-10 individuals that meets for 1-2 hours by teleconference each year. That group advises the program on the bigger picture issues –for instance, how the program should think about growing to match work force needs or how our approach/emphasis might need to adapt to changes in technology.

The current members of the Working Group are:

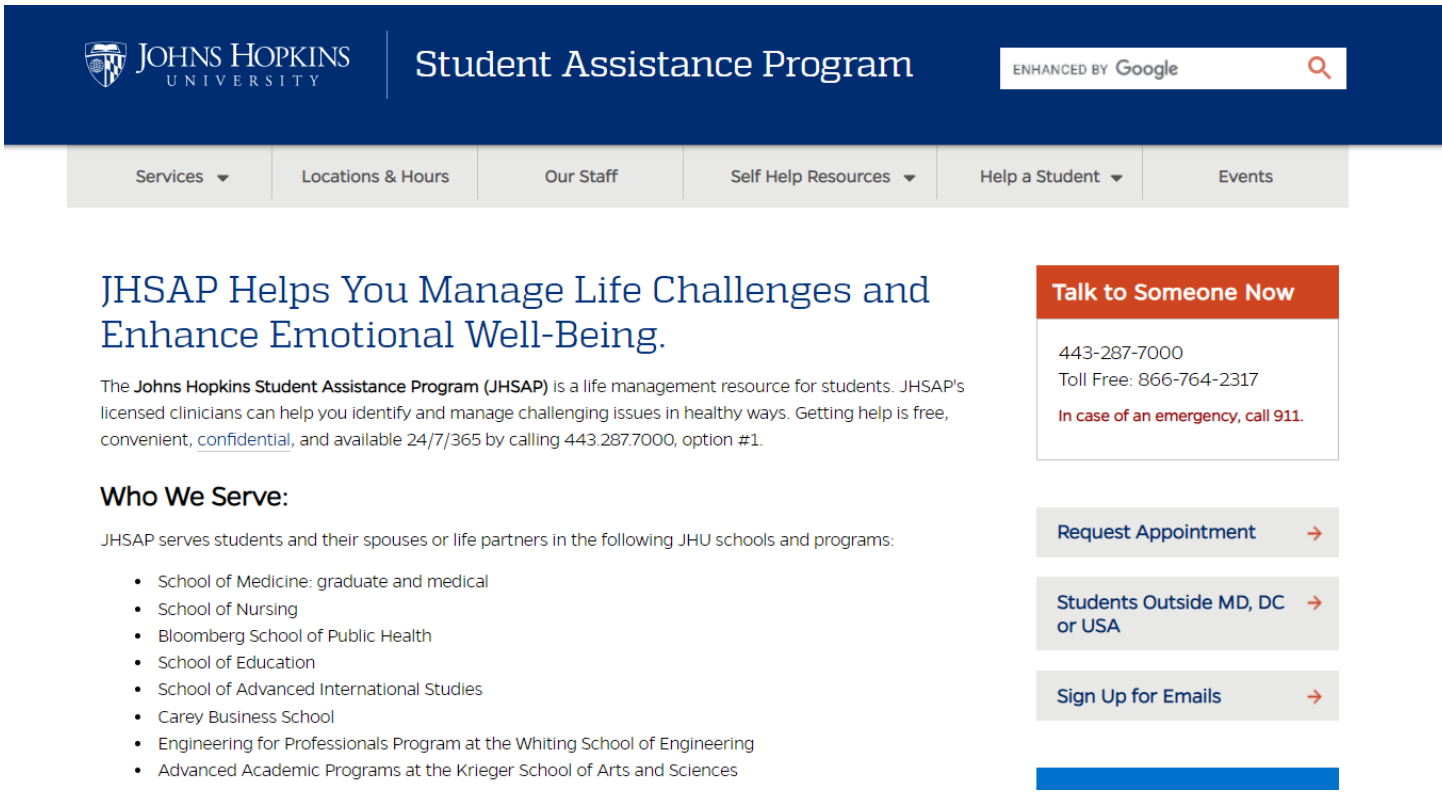
Heather Mefford, MD, PhD, Faculty, St. Jude Center for Pediatric Neurological Disease Research, Dept of Cell & Molecular Medicine and Member, NHGRI Board of Scientific Counselors, Working Group Chair
Komal Bajaj, MD, MS-HPEd Professor, Chief Quality Officer and Clinical Director of the Simulation Center, Albert Einstein College of Medicine, NYC Health+ Hospitals/Jacobi
Bonnie Baty, MS, Emeritus Director, Genetic Counseling Program, University of Utah
Jennifer Eichmeyer, MS, Program Director, Boise State University Genetic Counseling Master's Program
Katrina Goddard, PhD, Director, Division of Cancer Control and Population Sciences
Gillian Hooker, PhD, ScM, Chief Scientific Officer and Adjunct Associate Professor, Concert Genetics, Vanderbilt Genetic Counseling Training Program
Ellen Macnamara, ScM, Genetic Counselor, Course Instructor, Clinical Supervisor, and Professional supervisor, NHGRI, Undiagnosed Diseases Program, NIH
Debra Mathews, PhD, MA, Assistant Director for Science Program, Johns Hopkins Berman Institute of Bioethics and Associate Professor, Department of Pediatrics, Johns Hopkins University School of Medicine
Kelly Ormond, MS, Research Director, Genetic Counseling Program, Stanford University and Researcher, ETH (Zurich)
Gurvaneet Randhawa, MD, MPH, Medical Officer, Health Systems and Interventions Research Branch, Division of Cancer Control and Population Sciences, NCI
Katherine Wilemon, Founder and CEO of FH Foundation

Student Resources

Johns Hopkins Student Assistance Program

https://jhsap.org/

JHSAP offers a variety of services, including short-term counseling, crisis response, healthy relationship support, school-life coaching and adjustment, educational workshops, and self-help resources.



There are also a variety of other services available to all JHU students:

The Calm app: https://www.calm.com/jhu

Silver Cloud online mental health resources: https://studentaffairs.jhu.edu/counselingcenter/self-help-and-assessments/

JHSAP Services During the Intersecting Crises of 2020-2021:

We know that the COVID-19 pandemic, the ongoing racial injustice crisis, and ongoing political upheaval are causing significant disruption, anxiety, and distress within our community. JHSAP is committed to supporting students, wherever they may be, with services to support their emotional well-being during these distressing and disruptive times.

- 24/7 mental health support is available for students by calling the JHSAP number: 443-287-7000, option #1.
- Televideo services are available for students who are in Maryland, DC, Pennsylvania, and Delaware and whose mental health needs can be served via telehealth. Televideo, phone, or email consultations will be scheduled for students outside these areas.
- Students who are already working with a JHSAP clinician may call JHSAP at 443-287-7000, option #1 or send their clinician a secure message to jhsap@jhu.edu for any non-urgent issues.
- JHSAP is glad to assist students in finding care resources within their communities.
- Consultation to staff and faculty will continue as usual.

How to prepare for your televideo JHSAP appointment

Privacy and confidentiality are essential to developing the trust that underlies a therapeutic relationship. Your clinician will be in a private space during your session, and to ensure that both you and your clinician are able to focus and speak openly, we ask that you also find a private space that is free from distractions. If someone enters your private space during the session, we ask that you let your clinician know so that you can pause the session until you're alone again. We understand that at times, finding privacy can be challenging. If this is the case for you, please consult your clinician or JHSAP's student assistance specialist so that we can help problem-solve.

Featured

Opioid Epidemic Awareness & Education Program Available

JHSAP recorded a presentation on the opioid epidemic and available resources.

View the presentation →

NIH Employee Assistance Program

https://ors.od.nih.gov/sr/dohs/HealthAndWellness/EAP/Pages/index.aspx

Division of Occupational Health and Safety

Home | Health & Wellness | Safety | Your Role | Events | Contact Us

DOHS > Health & Wellness > Employee Assistance Program

Health and Wellness

Employee Assistance Program (EAP)

Please click on the links inside the center circle or mouse over the icons for more information.

Please note most EAP services are being provided virtually due to COVID-19 limitations.
If you have an inquiry about the NIH Employee Assistance Program, please call the office directly at (301) 496-3164. The office hours are 8:00am to 5:00pm, Monday through Thursday, and 7:30am to 4:00pm on Friday.

If you are experiencing a mental health crisis after hours, please call 911 or go to your closest emergency room. You may also call or text the Suicide Prevention Lifeline at 1-800-273-8255 .
If you need urgent support, after hours, from the NIH Occupational Medical Service, please call 301-496-1211 and ask the operator to speak with

NIH Civil Program
https://hr.nih.gov/working-nih/civil

Our mission is to foster civility throughout the NIH community.

Are you aware of a workplace situation involving uncivil behavior? Contact the Civil Program. Uncivil behavior includes:

- harassment
- sexual harassment
- inappropriate conduct
- intimidation
- bullying or
- other unproductive, disruptive, and/or violent behaviors

Important Note: Raising an allegation with the Civil Program is not equivalent to or in lieu of filing an EEO Complaint of Discrimination, under 29 C.F.R. 1614, or a grievance under the administrative or negotiated procedures included in the applicable Collective Bargaining Agreement (CBA). If you wish to pursue an EEO complaint, contact the Equity, Diversity, and Inclusion Office within 45 days of the discriminatory incident.

Understand your options. Learn more about the difference between the Civil Program and the Office of Equity, Diversity, and Inclusion (EDI).

Report a Concern

NIH Office of Intramural Training and Education

https://www.training.nih.gov/

Office of Intramural TRAINING & EDUCATION
build your career, shape the future

GO

NATIONAL INSTITUTES OF HEALTH | U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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overview for current nih trainees | summer interns | postbacs | graduate students | postdocs | medical/dental students

HOME › TRAINING PROGRAMS

FOR CURRENT TRAINEES

MAKING THE MOST OF YOUR NIH EXPERIENCE

In the twenty-first century, successful scientists need strong communication skills: you must be able to teach, in the research environment and perhaps in the classroom; you must collaborate effectively; and you must function well both as a manager and a leader. Furthermore, you must understand the career exploration process, the importance of networking, and effective job search strategies. These core competencies are at the heart of a successful research career and also represent the transferrable skills needed to make transitions to the non-bench careers that are critical to the success of the entire scientific enterprise.

Your NIH training should focus on development of science, professional, and career skills. You should take the time to assess your strengths and weaknesses, the activities you enjoy most, and the values that underlie your actions. There are many ways to contribute to the scientific enterprise and only you know the career paths that are right for you. The NIH offers a wide array of career development opportunities for you to use as you develop your own specific strategies for success.

Whether you are a summer intern who will be spending 8 to 10 weeks at the NIH, a postbac who will be here for a year or two, or a graduate student or postdoctoral fellow conducting biomedical research at the NIH for three to five years, your time here will be finite. To make the most of your NIH experience, you must plan your time wisely and begin essentially immediately to develop the skills and expertise that you will need to succeed during the next phase of your career.

MY OITE

Introduction to the NIH

Who conducts research at the NIH?

Read More about the NIH Intramural Research Program

Current Program Information

Summer Internships

Postbacs

Graduate Students

Medical/Dental Students

Postdocs

Intramural Investigator Database

The NIH Office of Intramural Training & Education (OITE) encourages you to focus your energies in three major areas:

- Doing outstanding science
- Attending to your career/professional development
- Exploring and contributing to the community around you

Clearly, science must be your first priority. But it would be a mistake to overlook or short-change the other two areas. OITE offers programs and services to help you develop professionally. We encourage you to work with other trainees in the summer, postbac, GPP, or postdoc community to get to know the DC area and help make it a better place.

CAREER/PROFESSIONAL DEVELOPMENT

Career and professional development begin with knowing yourself. Consider completing the Myers Briggs Type Indicator (MBTI), an assessment tool that will help you to understand your psychological makeup in terms of intellectual preferences: how do you take in information about the world around you, how do you make decisions, where do you get your energy? You can also make an appointment with a career counselor for help with self-reflection and increasing your self-awareness. Making solid career decisions depends on understanding what skills you possess, what interests excite you, and what values add meaning to your life.

If you are not already firmly committed to a particular career path (or perhaps even if you are), the next step in career/professional development is career exploration. What options are out there? What are various careers really like, and how does one prepare for them?

It is important to recognize that self-analysis and career exploration will not be restricted to the beginning of your career. In today's world, you are likely to change career directions multiple times, and each transition will require that you return to these activities.

CORE COMPETENCIES

There is broad agreement that core competencies provide an excellent way to look at career/professional development. Core competencies are primarily blends of skills and experience that future employers and/or educational institutions will be seeking. Specifically, you should aim to build competence in

- Career exploration and job search skills
- Communication
  - Writing
  - Speaking
  - Grant writing
  - Communicating in English (if you are not a native English speaker)
- Teaching and Mentoring
- Leadership and Management
- Responsible Conduct of Research
- Wellness

We offer programming in each of these areas.

NIH IRTA Policy Manual

Most students in the JHU/NIH GCTP are full-time pre-doctoral Intramural Research Training Assistants (IRTAs) at the NIH. It is important that trainees check their NIH messages on a regular basis, complete all required NIH trainings and paperwork, and communicate with program leadership about any plans to travel in order to remain in compliance with NIH policies. The complete NIH IRTA policy manual can be found here:

https://policymanual.nih.gov/2300-320-7

JHU/NIH GCTP Program Overview

In 1996, two outstanding research institutions, the National Human Genome Research Institute (NHGRI) at the National Institutes of Health and the Department of Health, Policy and Management (more recently, the Department of Health, Behavior and Society) at the Johns Hopkins Bloomberg School of Public Health (BSPH), collaborated to establish a unique genetic counseling graduate program. These two institutions were joined in 2019 by the Center for Cancer Research at the National Cancer Institute (NCI). The Johns Hopkins Bloomberg School of Public Health provides a strong academic home for the program including coursework in research methods and public health and research mentoring, while NHGRI and NCI provide funding, coursework in psychological counseling and genomics, research mentoring and dedicated leadership. This collaborative program represents the first allocation of federal funds to support graduate education in genetic counseling and is regarded as a significant effort to address new challenges resulting from the application of genomics research to clinical care.

The Program has distinguished itself from other programs by the depth of its instruction in psychological counseling and social and behavioral research. The program goals are to shape genetic counseling services through student and faculty research and develop outstanding genetic counselors who are innovators and leaders in:

- Psychotherapeutic genetic counseling,
- Genetic counseling research and scholarship
- Applications of genomics and precision health
- Transdisciplinary learning and practice, incorporating perspectives from public health, policy, ethics, and advocacy

Since its inception, the program has graduated a cadre of 100 genetic counselors who are broadening the scope of genetic counseling by contributing to the establishment of a research literature that critically examines aspects of the profession.

Program Description

The JHU/NIH Genetic Counseling Training Program prepares students for a Master of Science (ScM) degree from the Department of Health, Behavior and Society (HBS). This two- and one-half-year program provides academic preparation beyond that available from most genetic counseling programs. It requires 146 credit hours, including coursework taken at the NIH and Johns Hopkins, a minimum of four hundred contact hours of supervised clinical rotations in a variety of settings, and completion of an original research thesis of publishable quality. Interested students are encouraged to apply for subsequent admission to the HBS doctoral program. Historically, the program accepted four students per year, but with the new partnership with NCI, the program welcomed its first class of six students in 2019.

Students commute between the two campuses, spending approximately two days a week at BSPH in Baltimore and approximately one day a week at the NIH campus in Bethesda. During most academic terms, students also spend one to two days each week in a clinical rotation in the greater Baltimore-Washington region. At BSPH, students have access to a departmental student room as well as a quiet library study space on the roof of the main departmental building. In January 2020, the program's NIH offices moved from Building 31 to a new suite in the NIH Clinical Center. The new program suite includes private offices for the Program Director, the Associate Director, and the NIH Program Coordinator as well as carrels for the trainees. There is an additional training space on the fifth floor of the Clinical Center (5-3121). There is also a small kitchenette and a small conference room that is large enough to teach the single cohort courses. The trainees have easy access to the clinical research spaces as well as the clinical research meetings and NIH guest lecturers that frequently speak in the Clinical Center. The new suite also shares a hall with other researchers and genetic counselors from the Center for Precision Health Research, facilitating collaboration with some of the program's clinical supervisors and teaching faculty.

Curriculum Overview

The program's complete curriculum is included here. Students take courses throughout the 10 academic quarters. The courses are taught at both the NIH and BSPH campuses and include genetic and psychological counseling, medical and human genetics, research methods, public health, health communication, bioethics and public policy . Students take courses throughout the 10 academic quarters. The courses are taught at both the NIH and BSPH campuses and include genetic and psychological counseling, medical and human genetics, research methods, public health, health communication, bioethics and public policy.

The curriculum is designed to offer an intimate setting for learning genetic counseling concepts and skills, while offering significant interaction with a broader student body. The public health courses are taken with other graduate students in public health at the prestigious Bloomberg School of Public Health. Some of the genetics and genomics courses are taken with the genetics fellows on the NIH campus. The genetic counseling courses taken during each year of the program and the Introduction to Human Genetics and Clinical Genetics for Genetic Counselors courses are taught specifically for the genetic counseling trainees.

A unique aspect of the training program is the didactic and experiential focus on psychotherapeutic counseling skills. Trainees take a sequential series of counseling-related courses that allow for the development of skills throughout each year in the program. In addition, each student is assigned to an individual professional supervisor to support the development of their counseling skills. This supervisor is separate from the clinical rotation supervisor and is meant to provide both continuity and depth of feedback throughout a student's training. Students meet individually with the professional supervisor for an hour each

week to review audio recordings of their clinical work, to deepen self-awareness, and to explore alternative approaches. The supervision team is made up of genetic counselors who have previously taken part in professional supervision as part of the development of their own psychotherapeutic skills.

The curriculum is also designed to provide students support in the development of an original research question and the completion of the thesis process. In addition to courses in epidemiology, biostatistics, qualitative research methods, and research design, students take a three-term course series to support the development of the thesis proposal. The proposal draft is completed by the middle of the second year in the program, and students defend their ideas during an oral presentation prior to submitting the proposal to the IRB for review. Data are collected during the second summer in the program. Two faculty readers must attest that the written thesis is worthy of publication prior to the completion of the degree. The program funds each student's research project up to $5000.

There are additional opportunities for learning outside of the standard curriculum. The genetic counseling trainees discuss genetic-counseling related articles during journal clubs held periodically during the Friday seminars or at the homes of Executive Committee members. Students give scholarly case presentations during their second year in the program as part of the NIH Post-Clinic Conference. The program supports the attendance of all second- and third-year students at the annual conference of the National Society of Genetic Counselors, where they are encouraged to present the results of their thesis projects.

Program Accreditation

The JHU/NIH Genetic Counseling Training Program is fully accredited by the Accreditation Council for Genetic Counseling through January 2024. Graduates are eligible to sit for their American Board of Genetic Counseling certification examinations after completing the degree program and a logbook demonstrating significant involvement in at least 50 different cases.

Clinical Training and Fieldwork Opportunities

Training for a career in genetic counseling requires extensive interaction with clients in a variety of clinical settings. Accordingly, students have access to more than twenty-five clinical training sites in the Baltimore-Washington area, including adult, pediatric, prenatal, cancer, neurology, cardiology, and lab settings. Training opportunities include clinical research settings at the Johns Hopkins Hospital and the NIH Clinical Research Center. Finally, students have community-based experiences through unique resources located in the area. Other fieldwork opportunities include advocacy, policy, and bioethics rotations.

Rotations begin in the second term of the program with a standardized patient rotation (week 9) and are required throughout. During the academic year, first- and second-year students

attend their rotations once a week, while third year students may attend twice a week. Students also complete a full-time rotation during the summer between the first and second year of study, and many do an additional optional rotation during the second summer. Rotations provide a critical opportunity for students to gain and apply knowledge about genetic conditions, their impact on individuals and their families, and the role of the professional genetic counselor. Genetic counseling preceptors provide clinical supervision.

Students have an opportunity to be involved with well over the required 50 clinical cases during their training in our program, with the most recent graduating class completing an average of 134 unique cases each.

Research Training

A primary goal of the program is to train students to conduct applied research relevant to the practice of the field of genetic counseling. Students' research questions examine the social, behavioral, ethical, and policy elements of genetic counseling practice as well as elements of genetic counseling service delivery. The program involves faculty who serve as thesis advisors and committee members with diverse backgrounds and expertise in genetics, genomics, public health, bioethics, and social and behavioral research.

Participating Faculty and Advisors

The program is overseen by the Program Director, Lori Erby, PhD, ScM, a staff scientist and Associate Investigator in the NHGRI Center for Precision Health Research. The Academic Director, Chenery Lowe, is an Assistant Scientist in the Department of Health, Behavior and Society at BSPH and provides advising and research oversight. Debra Roter, Dr.PH is also continuing as the Emeritus Academic Director for part of the 2022-2023 school year, as the leadership change is awaiting final approval. Megan Cho, ScM, Genetic Counselor, NHGRI, serves as Associate Director of the Program, and Leila Jamal, ScM, PhD serves as Associate Director of Cancer Genomics. Charles Venditti, M.D, Ph.D., Senior Investigator, NHGRI, serves as Medical Director of the Program.

Students are assigned to a faculty advisor from either the NIH or BSPH upon arrival to the program. Once the student has identified a research question (usually by the middle of their first summer), the student chooses a new advisor who is best suited to provide assistance on the chosen topic. Advisors monitor students' progress, advise them on coursework and clinical rotations, and assist in selecting a thesis committee. NIH faculty, alongside of JHU faculty, serve as mentors in thesis design and IRB proposal development. An Executive Committee comprised of sixteen faculty members from the NIH and JHU administers the oral thesis presentations and written comprehensive examinations, monitors student progress, serves as the admissions committee, evaluates the curriculum and serves as thesis advisors. In 2009, the Working Group

was first convened to advise the NHGRI Scientific Director and GCTP Executive Committee annually on the direction and future development of the program.

Strategic Plan

Preamble

The JHU/NIH Genetic Counseling Training Program 2021 strategic plan is intended to guide the Program Leadership and the Executive Committee in decision-making about all aspects of the training program. The document is also designed to communicate to applicants about the nature of our program.

Although we have articulated five separate domains that each inform specific goals, each of the five domains are inter-related, and there are inherently cross-cutting themes between them.

Mission Statement

The JHU/NIH Genetic Counseling Training Program shapes genetic counseling services through student and faculty research and develops outstanding genetic counselors who are innovators and leaders in:

- psychotherapeutic genetic counseling,
- genetic counseling research and scholarship,
- applications of genomics and precision health
- transdisciplinary learning and practice, incorporating perspectives from public health, policy, ethics, and advocacy

Vision

Genetic counseling clinician scholars transform evidence-based genomic healthcare.

Psychotherapeutic Genetic Counseling

Goal 1: Train and support students' individual paths as they learn to employ a wide array of advanced psychotherapeutic counseling approaches to care for clients across genetic counseling contexts

Goal 2: Provide thought leadership and evidence related to the role of psychotherapeutic genetic counseling theories and techniques in optimizing client outcomes

Genetic Counseling Research and Scholarship

Goal 1: Foster students' ability to contribute to the evidence base in genetic counseling by engaging in and actively mentoring students in genetic counseling research

Goal 2: Train and equip students to investigate a broad and cross-cutting array of key scientific questions that inform and transform the evolving field of genetic counseling

Applications of Genomics and Precision Health

Goal 1: Enable students to become experts in genetics and genomic perspectives in diagnosis, risk assessment, prognosis, and treatment, including applications to Mendelian disease, common complex disease, and precision health

Goal 2: Equip students to become leaders in the development and implementation of innovative genomics and precision health initiatives

Transdisciplinary Learning and Practice

Goal 1: Support students in developing and applying an understanding of a variety of disciplinary perspectives, including public health, policy, ethics, and advocacy, in their research and practice as genetic counselors

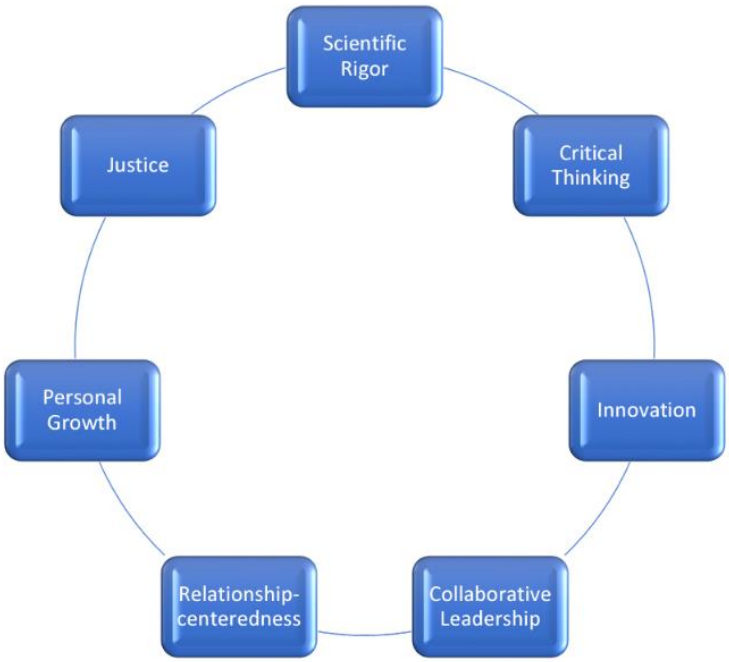
Goal 2: Provide students opportunities to explore one or more disciplinary topics beyond what is required in the formal curriculum

Justice, Equity, Diversity, and Inclusion

Goal 1: Promote diversity and inclusion within the JHU/NIH Genetic Counseling Training Program and the broader genetic counseling workforce

Goal 2: Train students to recognize and address health disparities, health equity, and justice in their genetic counseling research and practice

Values



Envisioned Future for Genetic Counseling

In the next ten years, genomic testing will be a routine part of healthcare, and genetic counselors (GCs) will be integrated into healthcare teams and systems. GCs will play an integral role in optimizing how individuals and families improve health and well-being through appropriate use of genomic information. They will advocate for, develop, and implement tailored systems to enhance the personal and clinical utility of genomic data at individual, familial, and population levels. The genetic counseling community will represent the diversity in the nation and will be engaged in enhancing the equitable provision of genetic counseling services. Increasingly, GCs will work outside of traditional medical settings, including in research settings, laboratories, in private companies, and in positions providing guidance

related to the delivery of genomic medicine. GCs will provide evidence-based, psychotherapeutically oriented, and client-centered care, and this care will improve cognitive, emotional, and behavioral outcomes for clients. GCs will lead efforts to study service delivery models and to develop evidence-based tools to supplement in-person genetic counseling. They will routinely consult with other care providers and healthcare managers.

Genomic information will become increasingly relevant to healthcare. Every person will interact with their genomic information at multiple points throughout life, and GCs will play a pivotal role in generating evidence supporting implementation of genomic data and translating that evidence into practice.

The JHU/NIH Genetic Counseling Training Program will transform future genetic counseling services through faculty and student research, mentoring, and training innovations.

Departmental Description and Degree Requirements - MASTER OF SCIENCE IN GENETIC COUNSELING

Program Director: Lori Erby, ScM, PhD, CGC
Associate Director: Megan Cho, ScM, CGC
Academic Director: Chenery Lowe, ScM, PhD, CGC
Associate Director of Cancer Genomics: Leila Jamal, ScM, PhD, CGC
BSPH-HBS Acad. Prog. Admin.: L. Robin Newcomb
NIH Program Coordinator: Ellie Younger, BA

General Degree Information

The Genetic Counseling Graduate Program is a joint effort between the Department of Health, Behavior and Society and the National Institutes of Health through the National Human Genome Research Institute (NHGRI) and the National Cancer Institute (NCI). This collaboration draws on resources from the two research institutions to address needs in the genetic counseling profession.

Program Requirements

Course Requirements

The program requires two and one-half years of full-time study. The curriculum consists of at least 146 credit hours of didactic course work in the areas of human genetics, genetic counseling, public policy, research methodology, ethics, and health education. Two credits of Supervised Clinical Rotation must be completed during the summer between the first and second years of study. The coursework is taken on the NIH campus in Bethesda, Maryland, and at Johns Hopkins Medical Campus in Baltimore. Clinical rotations extend in location from northern Baltimore to Washington DC.

Per School regulations, at least 12 credits of formal course work must be completed outside the Department of Health, Behavior and Society, of which at least eight (8) must be earned in another department of BSPH.

Satisfactory Academic Progress

All ScM students in the Department of Health, Behavior and Society are expected to maintain satisfactory academic standards for the duration of the degree program. In the department, satisfactory academic progress is defined as follows:

A minimum grade point average (GPA) of 2.75. Any ScM student who does not obtain the minimum 2.75 GPA will not be eligible to present his/her written research proposal. If this minimum grade point average is not maintained, the Program Directors will meet to determine the appropriate course of action.

ScM students are required to pass all of their clinical rotations and are required to pass a minimum of four semesters of clinical supervision. In the event a student fails to pass a rotation, criteria for repeating and successfully passing the rotation will be determined and communicated by the Program Director.

Clinical Rotations

In addition to didactic course work, the program requires a minimum of four hundred contact hours of supervised clinical rotations in a variety of settings. Clinical rotations begin in the second quarter of the program and are required throughout. During the first and second years, they are scheduled during one full or two half-days each week. During the third year, they are scheduled for two full days each week. These rotations provide a critical opportunity for students to learn directly about genetic conditions and their impact on individuals and their families, as well as about roles of the professional counselor. Most of the preceptors for clinical rotations are board-certified genetic counselors. Those who are not (medical social workers, health educators, physicians) enhance the clinical training by exposing students to a variety of disciplines. This type of broad experience is endorsed by the Accreditation Council for Genetic Counseling that accredits the program.

Thesis

Students are expected to conduct original research worthy of publication as part of their Master's thesis. To this end, students are required to take courses that will provide them with the training and experience to develop, carry out, and publish their research. Students are expected to develop an acceptable thesis proposal by the middle of the second year of study and to conduct their study during the second and third years of the program. Students are expected to prepare a publishable manuscript of their study results and present the findings at a research seminar in January of their third year on the NIH campus in Bethesda.

Written Comprehensive Examinations

During the fall of second year, students will complete a written comprehensive exam designed to assess the development of research-relate competencies required to undertake the thesis. The written exam will be assigned during that term of thesis proposal development and will consist of 5 essay questions that are to be addressed based on several pre-assigned genetic counseling research articles. The Executive Committee faculty members will evaluate responses in a blinded fashion and will award a pass/fail grade.

Oral Thesis Presentations

By December of the student's second year, the student must submit a written thesis research proposal. The written proposal is to be submitted two weeks prior to a scheduled meeting of the Executive Committee faculty. The proposal includes the following sections: an abstract, specific aims, hypotheses (if applicable), background, research plan, plan for analysis, significance of the proposed work and a timeline. Written feedback is returned to the student for response during an oral presentation with the Executive Committee.

Institutional Review Board

An application for SRC (Scientific Review Committee) and NHGRI IRB (Institutional Review Board) review at the NIH or the Johns Hopkins IRB must be submitted after successful completion of the comprehensive exam and the oral thesis presentation and prior to beginning thesis research.

Students should discuss any questions about the use of human subjects in their research activities with their advisor.

Program Accreditation

The Accreditation Council for Genetic Counseling re-accredited the program in 2016 for eight years. Graduates of the program are eligible to sit for the genetic counseling board examinations after completion of the degree program and

a clinical logbook demonstrating significant involvement in the evaluation and counseling of at least 50 patients seen in approved rotation sites.

Course location and modality is found on the BSPH website (https://www.jhsph.edu/courses).

A Guide to Finding GCTP Documents

All relevant program documents, including this handbook will be saved to the Genetic Counseling Training Program SharePoint site through Johns Hopkins. You can navigate to that site here:
https://my.jhsph.edu/sites/HBS/GCTP/SitePages/Home.aspx

Students will be invited to be members of the SharePoint Site.

The NIH Program Coordinator, Ellie Younger, can assist in locating documents if it is difficult to locate something.

Most courses in the program rely on the BSPH CoursePlus system, and relevant materials may be found that way. NIH FAES courses rely on Canvas rather than CoursePlus. When relevant, students will be given access to Canvas before the start of the term. Students will NOT need to pay for this access as the program covers the cost.

2022-23 Curriculum for Sc.M. Program in Genetic Counseling

Important General Notes

All students are required to enroll for a minimum of 12 credits per term in order to be considered full-time. If a student opts out of a course that is considered an elective in this curriculum, other electives must be selected with the student's adviser to maintain the 12 credit minimum.

There are three course requirements for which we are able to offer some choices. All options are reflected in the curriculum further below, but students are only required to choose one course from each set of requirements as outlined below:

QUALITATIVE RESEARCH METHODS REQUIREMENT

Students *must* take one of the following:
For those NOT planning to pursue a qualitative thesis:

1. PH.550.604 Qualitative Reasoning in Public Health - 2 credits, 1st or 2nd term (online) (highly recommended)

OR

2. PH.552.603 The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health - 0.5 credits, 1st, 2nd, or 3rd term (online) (less recommended, discuss with your advisor)

For those considering a qualitative thesis:

1. PH.550.604 Qualitative Reasoning in Public Health - 2 credits in 1st or 2nd term (online)

OR

2. PH.410.710 Concepts in Qualitative Research for Social and Behavioral Sciences - 3 credits, 2nd term (on-site)

Taking one of these courses also allows students to take the following additional elective:

PH.410.712 Theory and Practice in Qualitative Data Analysis and Interpretation for The Social and Behavioral Sciences - 3 credits, 3rd term (on-site)

SOCIAL DETERMINANTS OF HEALTH REQUIREMENT

Students *must* take one of the following:

1. PH.410.651 Health Literacy: Challenges and Strategies for Effective Communication - 3 credits, 2nd term (online)

OR

2. PH.552.610 The Social Determinants of Health - 0.5 credits, 1st, 2nd or 3rd term (online)

MEDICAL GENETICS REQUIREMENT

Students *must* take one of the following:

1. PH.415.613 Introduction to Medical Genetics I and PH.415.614 Introduction to Medical Genetics II - 2 credits each (online)

OR

2. Clinical Genetics for Genetic Counselors 1- 2 credits (asynchronous online) and Clinical Genetics for Genetic Counselors II – 2 credits (asynchronous online) (new courses, under review), 3rd and 4th terms

(All Courses are required unless indicated otherwise. Total credits listed per term include all electives. Actual totals vary.)

First Year		
FIRST TERM		**CREDITS**
PH.550.860	Academic & Research Ethics at BSPH (students must take this non-credit course upon matriculation) [4]	
PH.140.621	Statistical Methods in Public Health I	4
PH.340.721	Epidemiologic Inference in Public Health I	5

ED.861.502	Counseling Theory and Practice (elective for Psych majors/minors; required for others)	2.5
PH.415.610	Practical Genetic Counseling	2
PH.415.620	Introduction to Genetic Counseling I	2
PH.415.611	Introduction to Human Genetics I	2
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
	Credits	**20.5**
SECOND TERM		
PH.140.622	Statistical Methods in Public Health II	4
PH.410.615	Research Design in the Social and Behavioral Sciences	3
ED.861.502	Counseling Theory and Practice (elective for Psych majors/minors; required for others)	2.5
PH.415.621	Introduction to Genetic Counseling II	2
PH.415.612	Introduction to Human Genetics II	2
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
	Genetic Counseling Prenatal Standardized Patient Clinical Rotation (under review)	2
PH.410.651	Health Literacy: Challenges and Strategies for Effective Communication (elective) [6]	3
	Credits	**21.5**
THIRD TERM		
PH.140.623	Statistical Methods in Public Health III (elective)	4
PH.410.603	Introduction to Genetic Counseling Research	1
PH.415.613	Introduction to Medical Genetics I (or Clinical Genetics for Genetic Counselors I) [2]	2
PH.415.630	Therapeutic Genetic Counseling I	2
PH.415.640	Health Judgment and Decision Making	2
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
PH.415.851	Supervised Clinical Rotations: Genetic Counseling	4
	Credits	**18**
FOURTH TERM		
PH.415.650	Facilitating Family Adaptation to Loss and Disability I	2
PH.415.624	Ethical, Legal and Social Implications in Genetics and Genomics Over Time [3]	3
PH.415.675	Cancer Genetics: Managing the Risks Through Testing and Counseling	2
PH.415.614	Introduction to Medical Genetics II (or Clinical Genetics for Genetic Counselors) [2]	2
PH.415.880	Genetic Counseling Program Thesis Proposal Development I	2
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
PH.415.851	Supervised Clinical Rotations: Genetic Counseling (Total credits for 4th term: 18)	4
Summer		
PH.415.851	Supervised Clinical Rotations: Genetic Counseling (Total credits for 4th term AND Summer: 19)	2
	Credits	**22**
Second Year		
FIRST TERM		
PH.415.631	Therapeutic Genetic Counseling II	2
PH.415.710	Medical Genetics and Genomic Medicine: from Diagnosis to Treatment I [5]	2
PH.415.881	Genetic Counseling Program Thesis Proposal Development II	2

PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
PH.415.851	Supervised Clinical Rotations: Genetic Counseling	4
PH.550.600	Living Science Ethics – Responsible Conduct of Research (also offered 4th term; take this or Research Ethics and Integrity)	1
PH.552.601	Foundational Principles of Public Health (also offered 2nd and 3rd term) [7]	0.5
PH.552.607	Essentials of Environmental Health (also offered 2nd and 3rd term) [7]	0.5
PH.552.612	Essentials of One Health (also offered 4th term) [7]	0.5
PH.552.603	The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health (take at least one qualitative course; also offered 2nd and 3rd term) [7]	0.5
PH.550.604	Qualitative Reasoning in Public Health (take at least one qualitative course; also offered in 2nd term)	2
	Credits	**18**
SECOND TERM		
PH.410.710	Concepts in Qualitative Research for Social and Behavioral Sciences (take at least one qualitative course)	3
PH.550.604	Qualitative Reasoning in Public Health (take at least one qualitative course; also offered 1st term)	2
PH.415.651	Facilitating Family Adaptation to Loss and Disability II	2
PH.415.711	Medical Genetics and Genomic Medicine: from Diagnosis to Treatment II [5]	2
PH.415.882	Genetic Counseling Program Thesis Proposal Development III	2
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
PH.415.851	Supervised Clinical Rotations: Genetic Counseling (2 credits required plus 2 credits elective non-clinical rotation)	4
PH.552.610	The Social Determinants of Health (take this or Health Literacy; also offered 1st and 3rd term) [7]	0.5
PH.552.611	Globalization and Population Health (also offered 1st and 3rd term) [7]	0.5
	Credits	**19**
THIRD TERM		
PH.306.665	Research Ethics and integrity: U.S. and International Issues (take this or Living Science Ethics Responsible Conduct of Research)	3
PH.415.866	Current Topics in Molecular Genetics I (elective) [2]	1
PH.415.840	SS/R: Genetic Counseling	2
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
PH.410.624	Genetic Counseling Cancer Standardized Patient Clinical Rotation	4
PH.410.712	Theory and Practice in Qualitative Data Analysis and Interpretation for The Social and Behavioral Sciences (elective)	3
	Credits	**16**
FOURTH TERM		
PH.415.867	Current Topics in Molecular Genetics II (elective)	1
PH.415.624	Ethical, Legal, and Social Implications In Genetics and Genomics Over Time [3]	3
PH.550.600	Living Science Ethics- Responsible Conduct of Research (also offered 1st term; take this or Research Ethics and Integrity)	1
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1

PH.415.851	Supervised Clinical Rotations: Genetic Counseling	4
PH.415.840	SS/R: Genetic Counseling	2
	Credits	**14**
Third Year		
FIRST TERM		
PH.415.701	Genetic Counseling Lab I	2
PH.412.710	Medical Genetics and Gnomic Medicine: from Diagnosis to Treatment I [5]	2
PH.415.820	Thesis Research: Genetic Counseling	4
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
PH.415.851	Supervised Clinical Rotations: Genetic Counseling (can take 4 credits across 2 terms or 8 credits in one term)	4
	Credits	**15**
SECOND TERM		
PH.415.702	Genetic Counseling Lab II	2
PH.415.711	Medical Genetics and Genomic Medicine: from Diagnosis to Treatment II [5]	2
PH.415.820	Thesis Research: Genetic Counseling	4
PH.415.861	Genetic Counseling Seminar: Topics in the Field [2]	2
PH.415.870	Genetic Counseling Clinical Supervision	1
PH.415.851	Supervised Clinical Rotations: Genetic Counseling (can take 4 credits across 2 terms or 8 credits in one term)	4
	Credits	**15**
	Total Credits	**179**

[1] Fall semester course offered through the Johns Hopkins School of Education

[2] NIH FAES courses also listed at Johns Hopkins

[3] Two courses alternate every other year: For the 2022-23 AY, PH 415.624 ETHICAL, LEGAL AND SOCIAL IMPLICATIONS IN GENETICS AND GENOMICS OVER TIME will be taught. It alternates with PH 415.619 NEW GENETIC TECHNOLOGIES AND PUBLIC POLICY.

[4] This non-credit, online mini-course **must** be completed before you can take online courses. You must enroll yourself. The course includes one mandatory LiveTalk session.
See https://courseplus.jhsph.edu/core/index.cfm/go/course.home/cid/90/ to enroll.

[5] Precision Health and Precision Oncology (under development) alternate every other year with 415.710/711 Medical Genomics and Genomic Medicine I/II.

[6] For students taking the Counseling Theory course, it will be difficult to take Health Literacy during this term in the first year. Students can choose to take in the second year.

[7] Enroll in 1-4 of the required half-credit PH classes listed in Year 2, which are offered in terms 1, 2 3 and (in some cases) 4.

Academic Advising

Students are assigned an Academic Advisor upon entry into the program. This individual is a member of the JHU/NIH GCTP Executive Committee. Students are expected to meet with the advisor at least once per semester, and often more frequently as outlined in the following Milestones Document. These meetings MUST be documented by a file saved by the student to the student's Microsoft Teams folder through the NIH GCTP Teams site.

Once a thesis advisor has been selected by the end of the first year, the student will submit an advisor change via email to the BSPH-HBS Academic Program Administrator so that the thesis advisor also becomes the academic advisor.

In many quarters, there are not many (or sometimes any) electives. In addition, the student's advisor may not be as familiar with specific elective courses as are previous students and alumni mentors. However, it is still valuable for students to discuss with advisors the types of electives they are considering in light of their specific professional goals.

There are many additional topics that a student should also bring to their advising meetings, including, but not limited to:

- The student's professional goals
- Anticipated challenges in the program (so that the program can help to identify resources as early as possible)
- Actual challenges experienced while embarking on the professional journey
- Academic status
- Clinical rotation progress
- The advisor's professional and research interests
- Possible research topics
- Thesis progress

The guide below suggests topics for each specific advising period, but each students' advising experience will be tailored to the specific individual needs.

MILESTONES FOR THE Genetic Counseling ScM PROGRAM			
Meeting Dates	Task/Event	Key Deadlines	Date Completed
First Year			
Terms 1 and 2			
Before 3rd term registration	**Academic Advisor Meeting**		
	Course Selections		
	Academic Status		
	Professional Goals		
	Anticipated Challenges in the Program		
	Actual Challenges Experienced		
Terms 3 and 4			
Before the end of the term	**Academic Advisor Meeting**		
	Course Selections		
	Academic Status		
	Discuss potential thesis topics		
	Discuss thesis advisor choice (choose a second advisor to serve as thesis advisor or use academic advisor in both capacities)		
	Discuss summer internship/rotation plans		
Second Year			
Term 1			
Before 2nd term registration	**Academic Advisor Meeting**		
	Course Selections		
	Academic Status		
	Thesis Proposal Progress		
	Clinical Rotation Progress/summer rotation experience		
At least twice during the term	**Thesis Advisor Meetings**		
	Discuss proposal draft progress		
	Decide on other thesis committee members		

Second Year (cont)			
Term 2			
At least twice during the term	**Thesis Advisor Meetings**		
	Discuss proposal draft progress	Before Mid-November	
	Thesis Advisor meeting/phone call to discuss strategy for Executive Committee Meeting	The day before the Executive Committee meeting	
	Thesis Advisor attends the Executive Committee meeting	Early-mid Dec	
	Thesis advisor meeting/call to plan for written response to the Executive Committee	After the Executive Committee meeting	
Term 3			
At least once during the term	**Thesis Advisor Meeting**		
	Discuss proposal revisions and the written response to the Executive Committee's concerns	January 30	
	Discuss submission to the IRB		
	Monitor progress toward thesis timeline		
Term 4			
Before the end of the term during the term	**Academic Advisor Meeting**		
	Course selections		
	Discuss Clinical Rotation Experiences/Clinical Skills Development		
	Academic Status		
	Discuss summer internship/rotation/research plans		
At least once during the term	**Thesis Advisor Meeting**		
	Monitor progress toward the thesis timeline		
Third Year			
Term 1			
Before 2nd term registration	**Academic Advisor Meeting**		
	Course Selections		
	Academic Status		
	Discuss potential career directions/job search		
At least once during the term	**Thesis Advisor Meetings**		
	Monitor progress toward thesis timeline		
	Discuss data analysis issues		
	Review thesis draft		

	Discuss thesis readers		
	Review student's poster for NHGRI research retreat		
Term 2			
At least twice during the term	**Academic Advisor Meetings**		
	Academic Status		
	Discuss job search		
	Thesis Advisor Meetings		
	Review written thesis document	By Mid-November	
	Assist in preparation for final thesis seminar		
	Plan for publication		

Academic due dates for the ScM

https://my.jhsph.edu/Offices/StudentAffairs/RecordsRegistration/MastersCandidateInformation/Documents/Due%20DatesScM%20MBe%20and%202021.22.pdf

Requirement	**Due Dates for Summer Conferral August 26, 2022**	**Due Dates for Fall Conferral December 30, 2022**	**Due Dates for Spring Conferral May 25, 2022**
Student has: ***Verified with their*** BSPH-HBS Academic Program Administrator ***that all academic requirements for the degree (except for submission of the thesis) have been fulfilled.***	**Friday June 10, 2022**	**Friday October 14, 2022**	**Friday February 10, 2022**
Student has submitted: ***Appointment of Thesis Readers Form to the Office of Records & Registration.***	**Friday June 17, 2022**	**Friday October 28, 2022**	**Friday March 17, 2023**
Student has submitted: ***Thesis acceptance letters to the Office of Records & Registration and approval of electronic copy of thesis submitted to Sheridan Library: http://etd.library.jhu.edu***	**Friday August 26, 2022** ****Note: Summer 2021 enrollment is not required if completion is after May 20, 2021***	**Friday December 16, 2022**	**Friday May 5, 2023**

For a student planning for a spring conferral, the NIH traineeship runs through January 31, 2023. The deadline to submit all thesis documents and letters to avoid paying third term tuition is Friday, February 3, 2023.

Seminar Overview and Timing of Cases

The Friday seminar course is the one time each week that the entire program comes together. The course meets virtually most weeks but will meet in-person at the NIH once per term. Typically, the first hour involves a guest speaker with active discussion with the students. The second hour involves student case presentations. The students take turns presenting cases, relying on a rotation that is managed by a student representative. In the fall, presentations are made by second- and third-year students. In the spring, presentations are made by first- and second-year students. See the following section for information on the format for case presentations.

Some weeks, we will have journal club (as described later in this document) or a group case assessment. The case assessment will involve a hypothetical case assigned ahead of time that will typically be discussed in small group break-out sessions. The case is meant to provide additional practice for students in case preparation.

In addition to the rotating cases, there are three times during the year that involve student presentations in seminar.

- First week of fall: Second year students give 10–15-minute presentations about their summer rotation experiences
- Last week of fall: Second year students give 10–15-minute presentations on their thesis proposals
- Last week of spring: Second year students present pre-recorded role-plays for counseling demonstration and discussion. About 4 weeks prior to that date, program leaders will provide a generic scenario for the role-plays to follow. Each student will then choose a more specific case within those boundaries.

SOAP Case Presentations in Seminar

Most student case presentations will follow the SOAP format, as described here. Students will present in seminar verbally following this format and will also submit the written document via CoursePlus. SOAP stands for Subjective Objective Assessment and Plan. The presentation will begin with a one to two sentence overview of the case and reason for visit to set the stage. The Subjective portion then involves a direct transcript of a portion of a student's real case (with names changed). The Subjective should take up approximately ¾ of a single-spaced page and may include several non-contiguous parts of the transcript. However, what is included should provide a sufficient picture of the relevant part of the case to support the primary teaching point(s) for the case. The Objective includes a few lines about the objective medical information pertinent to the case (patient demographics, relevant family or personal history, relevant test results). The Assessment should involve another ¾ of a page of the student's assessment of the genetic counseling session perhaps including a psychosocial assessment of the client and how that influenced the counseling, an assessment of the session's counseling goals and how those were/were not achieved, and/or the student's reflections on their own reactions within the session. It is reasonable for the assessment to reflect how the student has processed the case in supervision. The Plan then includes a statement or two about the plan for follow-up with the client. The case then concludes with 3-4 questions posed by the presenter for discussion in seminar. These questions are centered around the key teaching points of the case.

Although most case presentations will follow the SOAP format. Each student is allowed to choose to do one more traditional case presentation in each academic year if they so choose. A more traditional case presentation will typically involve a 30-minute PowerPoint presentation on a medical aspect of a case – most frequently on a topic that might not be familiar to most students. The presentation should still begin with the reason for visit, a brief overview

of the client's main concerns, and the relevant personal and family medical history. The presentation then concludes with an opportunity for the student to teach attendees about the medical aspects of the case.

Certificate Programs

- Students are eligible to consider certificate programs for Hopkins's students only and those for Hopkins and non-degree students. More info here

Certificate Programs for Hopkins Students Only

- Community-Based Public Health (CBPH)
- Evaluation: International Health Programs
- Gender and Health
- Gerontology
- Global Health*
- Health and Human Rights
- Health Disparities and Health Inequality
- Humanitarian Health
- Public Health Advocacy
- Public Health Preparedness
- Rigor, Reproducibility and Responsibility in Scientific Practice
- Vaccine Science and Policy

Certificate Programs for Hopkins and Non-Degree Students

- Adolescent Health*
- Bioethics
- Climate and Health
- Clinical Trials*
- Demographic Methods
- Environmental and Occupational Health*
- Epidemiology for Public Health Professionals
- Food Systems, the Environment & Public Health*
- Health Communication
- Health Education
- Health Finance and Management*
- Healthcare Epidemiology and Infection Prevention and Control
- Humane Sciences and Toxicology Policy
- Injury and Violence Prevention
- Leadership for Public Health and Healthcare*
- Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) Public Health
- Maternal and Child Health
- Mental Health Policy, Economics and Services

- Pharmacoepidemiology and Drug Safety Certificate
- Population and Health
- Product Stewardship for Sustainability*
- Public Health Economics
- Public Health Informatics*
- Public Health Training Certificate for American Indian Health Professionals
- Public Mental Health Research
- Quality, Patient Safety, and Outcomes Research*
- Risk Sciences and Public Policy
- Tropical Medicine

Clinical Rotations and Fieldwork experiences

Overview

Each student is required to participate in rotations throughout their training, beginning during their second term, with the exception of the second summer which is optional. Students graduate with enough qualifying cases to be eligible for Board certification through the American Board of Genetic Counseling (ABGC).

Students are expected to spend approximately 8 hours per week at their rotation site during required rotation blocks of their 1st and 2nd year, and 8-16 hours per week at their rotation site(s) during their 3rd year in the program. Most of that time will be spent seeing scheduled patients; however, indirect patient care (e.g. case preparation, consultation notes) may also be part of the rotation depending on expectations discussed up front between the supervisor and student. Students should keep track of all cases they observe or participate in and have those ready for the supervisor to review within a timely manner. Similarly, mid-rotation and final evaluations should be completed at the appropriate times. If there are concerns that either the student or supervisor has, either group may reach out at any point to the Associate Program Director, Megan Cho (megan.cho@nih.gov), to discuss how the concerns may be resolved. Generally, the issue should initially try to be resolved by both parties themselves; if not, or if resolution is unclear, the Associate Director will take further action. Grading of the rotation will be Pass/Fail (with Incomplete as an additional option) and based on attendance, participation, and completion of responsibilities as outlined and evaluated by the rotation supervisor.

Time spent at rotation sites, and relevant work, should be prioritized by the student. Any schedule conflicts that are anticipated to arise during the rotation period should be discussed up front. Any missed time, planned or unplanned, must be made up so that the number of hours still meets the original expectation.

Students are expected to bring goals for the rotation to be discussed with the supervisor on the first day of the rotation or during any relevant orientation. The learning objectives will be different for each student at each rotation, depending on the site, the length of time the student has been in training, and their own individual strengths and weaknesses. In addition, each student meets for one hour weekly for Professional Supervision with a member of the GCTP program faculty where their rotation progress is also monitored. As part of that supervision, students are expected to play audio recordings of sessions in which they counseled, so that they can focus on their areas of growth or other topics that may come up (e.g., countertransference).

The lead rotation supervisor their delegate is responsible for ensuring access to a safe rotation site (e.g., coordinating any required onboarding) as well as ensuring that any supervisor signing off on a student's logbook case is a certified genetic counselor in good standing with the ABGC.

Clinical Rotation Expectations

- There are two primary goals of the clinical rotations—to learn a LOT about clinical practice, and to have experiences that will prepare you to become competent to practice and to be certified by the ABGC. Subsumed within these two goals is the goal that you will see a variety of cases that establish your eligibility to sit for the boards.
- Approximately two weeks prior to each rotation Megan sends a letter to the rotation site that includes information about your previous clinical experiences and logistical information (e.g. the start and end dates for the rotation). Attached with the letter is a copy of your current CV and the Program's evaluation forms. Megan will let you know when these "letters of introduction" have been sent. It is your responsibility to provide her with a current copy of your CV.
- Access to local rotation sites is negotiated among representatives from the two Maryland training programs in February of each year for the upcoming academic year. There is very little flexibility once these schedules are set.
- The summer between your first and second years you are required to find a rotation (and to pay tuition for supervision credits). This may offer an opportunity to go to another location where you might want to work or to explore an area of the world of interest to you. Most students are in clinic daily during their summer rotations. This is the best way to learn practical aspects of how clinics work, to practice case management skills and to be involved in client follow-up. Students negotiate their own hours. It is expected that your rotation will be a minimum of six weeks; either the first half of the summer or the second half. As you consider what you want to do, speak with Megan. She may be able to help you make connections with program alumni or colleagues who are eager to have students for *ad hoc* rotations over the summer. You should choose a location for your summer rotation as soon as possible in your 1st year, as many regions establish waitlists as early as September. There are also multiple sites in our own region that will be happy to host students who wish to stay in the area.
- In January of your 2nd year you may request rotation sites for your third year. These requests must occur prior to the meeting between the three local programs for the request to be accommodated. Megan makes every effort to grant the requests. Other than your third year, rotation site assignments are typically not done upon request.

Student responsibilities

- After Megan has sent to the supervisors the "letters of introduction", and a minimum of one week before each rotation begins, you should contact the clinic supervisor to arrange your schedule and learn about any pre-rotation responsibilities you might have. The supervisor(s) may ask to meet with you prior to your first day seeing clients to review clinic procedures and policies and be oriented to the site.
- Certain rotations have paperwork to complete and/or background articles for students to read before the rotation starts. Be sure to come to your first meeting with your supervisor prepared by having completed any necessary forms or reading.
- You should be sure you know how to get to the clinic, and find parking if necessary, before your first day in clinic. Please arrive the first day of your rotation with a list of goals for the rotation. You and your clinical supervisor(s) should discuss your goals and work together to establish mutually agreed upon goals. These should complement, but not duplicate, goals of professional supervision.
- The first day or two of your first clinical rotation may be primarily observation. Take this opportunity to learn as much as you can about clinic protocols and see as many procedures as you can. This may be more difficult to do later in your training. You are encouraged to see procedures that you are likely to have to explain to clients in the future—visit the NICU, watch ultrasound and prenatal diagnoses, fetal pathology, etc. Medical procedures, however, often occur in hot, stressful environments. You might feel faint. This is not uncommon. If you feel faint you should lean against a wall or sit down. If necessary, excuse yourself and later tell your supervisor why.
- Students are evaluated by their supervisor(s) and have an opportunity to evaluate their supervisor(s). We ask the supervisors to provide you with feedback throughout the rotation and to provide you with a mid-term evaluation. Students should request the midterm evaluation, if necessary—it is occasionally overlooked by busy supervisors.

At the end of the rotation, you provide one another with written evaluations that you also discuss directly. Please review the evaluation forms prior to your first rotation (they can be found in Typhon).

- You are expected to physically (or virtually) be present in clinic a minimum of 8 hours each week during the first and second academic years. During your third year you are required to attend clinic 16 hours per week for one term or 8 hours per week for both terms. Additional hours in clinic are expected only if you volunteer them and can afford the extra time. These expectations are communicated with the site supervisor(s). You should expect to have preparation and follow-up work related to cases. This work will exceed the required number of hours per week in clinic. However, if you are asked by the supervisor to be present for longer than the required number of hours each week, please discuss with your supervisor the conflict between the Program's and the site's expectations. If a problem persists, please take the issue to Megan.
- Please make every effort to audiotape any case in which you have any role at all. You are expected to audiotape every case unless the client asks you not to. This expectation is communicated to the clinical supervisor(s), but you should discuss this expectation with him/her as well. It is your responsibility to ask the client's permission before you audiotape—they occasionally say no. Never counsel a client without a supervisor in the room unless you have an audiotape recorder working.

General tips/things to remember

- You should dress appropriately for clinic. Some clinics adhere strictly to OSHA regulations or hospital policies (e.g. no uncovered shoulders, no open-toed shoes), while others are more permissive. It is better to go to clinic on your first day dressed more conservatively. Once there, you can judge the dress code by the appearance of your supervisor(s). If you have any questions, you should ask your supervisor(s) directly.
- Patients or clients should always be referred to by their last names, unless you ask their permission to do otherwise and unless this is permitted by the supervisor and other clinical faculty in your rotation site. Physicians should also be referred to as Doctor so-and-so (unless they ask you to call them by their first name–even so, always use their formal title in a session with a client).
- Always be prepared for clinic. Go into a session having done your homework: condition etiology, differential diagnoses, risk assessment issues you can anticipate, genetic testing options, medical management options, family dynamics and concerns, etc. (There will be some cases you can't prepare for because unexpected issues arise during the session.)
- Unless you are in a serious time crunch (like the patient is arriving in 10 minutes), GeneReviews should *never* be your only resource about a condition. If supervisors ask you to do a write up about a syndrome, do not take it from GeneReviews. You should, at a bare minimum, pull a review article or two off of Pubmed. The primary literature should always be your first source of data.
- You are eligible for reimbursement for parking at off-site rotations. This does not include any JHU or NIH sites. See the travel reimbursement policy for other rotation-related travel expenses. Please keep your receipts. They must be turned into the NIH Program Coordinator for reimbursement within one week of the end of each quarter. The receipts must be accompanied by a local travel reimbursement form signed by Megan or Lori. This form can be found on inside.genome.gov. You must be connected to VPN or on campus to access this site.
- If you have concerns with some aspect of your rotation, such as the protocols or practices in the clinic, you should first address it with the supervisor by way of general inquiry. "I am curious why you choose to do… in your clinic." Supervisors and other medical staff associated with the clinic welcome discussions of clinic policies and procedures, if they are broached in a polite and non-confrontational way. If this seems inappropriate, or if you what you learn concerns you, the issue can be discussed with Megan or during professional supervision.
- Get in the habit of affirming your own skills early. Find a positive in every experience. When a student becomes unable to find positive elements or to accept praise, the rotation becomes difficult for the student and the supervisor(s). Most supervisors love to teach and their rewards come from the enthusiasm of the students in learning.
- You can <u>always</u> get something out of every rotation. If the psychosocial aspects of counseling are not fostered during your rotation at a particular setting, focus on learning about clinical genetics and medicine. During

professional supervision you will have an opportunity to talk about ways of approaching psychosocial aspects of the session that may have been overlooked.

- **Supervisors are volunteers**. Most are eager to supervise students. Students should always keep in mind that they are ambassadors for the Program and should respect the volunteer nature of the relationship. We are always looking for ways to help the supervisors feel an important role in the vitality and rigor of the Program. Students should foster the supervisor's feelings of connection to the Program.

Official Logbook

- In Typhon, you will maintain a logbook to keep a record of **all** the cases you see and your role(s) within each case.
- Prior to leaving a rotation, make sure that your log forms are complete and ask your supervisor(s) to sign off in Typhon.
- In order to graduate, you need a complete logbook with signatures. Everyone is required to have a minimum of 50 core cases that demonstrate your exposure to the breadth of genetic issues that clients and families face across the lifespan and that includes a variety of service delivery models. If you have questions about this, please speak with Megan. Up to 10 of your 50 required core cases may involve standardized patients. Your logbook should contain more than the required 50 cases.
- The JHU/NHGRI program must ensure that we have the proper affiliation agreements in place in order to student a student to a site. The minimum requirement for cases to be countable are that they are supervised by a board certified genetic counselor with at least one year of experience.

Liability and Insurance Issues

- You must have insurance coverage to see clients in clinic while a student. To receive insurance coverage, you <u>must</u> be registered for credits (Supervised Clinical Rotation, course # 415.851.92). The only exception to this is when you are doing a rotation at NIH. Although you still have to register for the credits if you are rotating at NIH during the academic year, the NIH provides your insurance coverage. During your second summer, you do not need to register for credits when completing a rotation at the NIH.
- The Program has established Training Affiliation Agreements with all of the DC/Baltimore area sites at which you will rotate. This is an administrative and legal document that establishes the student's, clinic's and Program's rights and responsibilities with regard to the rotation.
- If you do a rotation at an institution outside of the DC/Baltimore area, it is very likely that the outside institution will require a Training Affiliation Agreement be established with JHU. These must be reviewed and approved by attorneys at both institutions. The review and approval process takes a <u>minimum</u> of six weeks and it can take months. A hospital or clinic that requires an agreement will not permit you to see patients until the agreement is fully executed (sign by authorized representatives at both institutions).
- The agreement review and approval process is one that Megan manages through her liaison at JHU.

List of Rotation Sites

The primary supervisor for each site is indicated by an asterisk. She or he should be your first point of contact at the site. If there is more than one individual asterisked, you should contact each of the individuals asterisked

AAMC MFM/prenatal
Ilana Mittman, PhD, MS CGC
185 Harry S Truman PKWY
Suite # 120
Annapolis, MD 21401
Email address: imittman@aahs.org

CCRM Northern Virginia (REI/IVF)
Carter Owen, MD
-Only shadowing available at this time.

Children's National Medical Center (peds)
Supervisors: Rhonda Schonberg*, Joyce Turner, Hillary Porter, Kara Simpson; Miller, Ilana Melissa. <imiller@childrensnational.org>; Maccia, Christine Lynn. <cmaccia@childrensnational.org>; Pomorski, Gabrielle Alexis. <gpomorski@childrensnational.org>; Weston, Julia A.. <jweston@childrensnational.org>; Hain, Heather <hhain@childrensnational.org>
Address:
Children's National Research & Innovation Campus
7125 13th Place NW
Washington, DC 20012 Phone: 202-476-4166
202-476-3526 (Rhonda direct)
Fax: 202-476-2390
Email address: rlschonb@cnmc.org , for peds rotations – **Only contact Rhonda**
Miller, Ilana <imiller@childrensnational.org>; Maccia, Christine <cmaccia@childrensnational.org>; Kara Simpson <KSimpson@childrensnational.org>; Pomorski, Gabrielle <gpomorski@childrensnational.org>; Weston, Julia <jweston@childrensnational.org>; Hain, Heather <hhain@childrensnational.org>; Porter, Hillary <HPorter@childrensnational.org>

Children's National Medical Center Neurogenetics
Supervisor: Meira Meltzer
Email Address: mmeltzer@childrensnational.org
Children's National Med Ctr
Res Ctr Gen Medicine
111 Michigan Ave, NW
Washington DC 20010
Phone: 202-476-6249
Fax: 202-476-4336

Franklin Square Medical Center (MedStar) – prenatal
Supervisor: Allison Costa*, Renee (PT)
Email address: Allison.B.Costa@medstar.net
MedStar Franklin Square Medical Center
9000 Franklin Square Drive

Baltimore, MD, US 21237
(North east of Baltimore city, off 95)

GARD (Genetics and Rare Disease Information Center, non-clinical)
Supervisors: Janine Lewis, Maria Della Rocca, Michelle Snyder*, Lois Lander, Barbara Gherman
Address:
Genetic and Rare Diseases Information Center
ICF International Consultants
1803 Research Blvd Suite 301
Rockville MD 20850
Phone: 301-251-4982 (Michelle), 301-251-4960 (Janine),
Fax: (301) 251-4911
Email address: mSnyder@icfi.com (Michelle) jlewis3@icfi.com (Janine)

GeneDx (laboratory)
Supervisors: Tara Hart*, Laura Goodell*
Address:
207 Perry Parkway
Gaithersburg, MD 20877
Phone: 301-519-2100 (ext. 103)
Fax: 301-519-2892
Email address: thart@genedx.com and LGoodell@genedx.com

Genetics and IVF (prenatal)
Supervisor: Mary Sands*
Address:
Genetics & IVF Institute
3015 Williams Drive
Fairfax, VA 22031
Phone: 703-698-7355 (main)
703-698-3916 (Shelby)
703-289-1730 (Sarah)
Fax: 703-698-1137
Email address: msands@givf.com

Genome Medical
Point of contact: Shannon Wieloch
Emails: swieloch@genomemedical.com; natalie.beck@genomemedical.com
Often Natalie Beck (originally @JHU peds) is our student's supervisor)
Notes: NO RECORDING allowed

Georgetown University Cancer Control Program
Lombardi Cancer Center
*Beth Peshkin, Kelsey Newell, Kavitha Kolla, Veronique Weinstein
Address:
Georgetown Univ
3300 Whitehaven St, Ste 4100
Washington DC 20007-2401
Phone:
Fax: (202) 687-8444

Email address: peshkinb@georgetown.edu

Greater Baltimore Medical Center (GBMC, prenatal, peds, cancer, adult)
Supervisors: Jennifer (Jen) Billiet* (Cancer, adult), Amy Kimball* and Marcia Ferguson* (prenatal, peds)
Address:
Greater Baltimore Med Center
6701 North Charles Street Suite 2315
Baltimore, MD 21204
Phone: 443-849-2536 prenatal, 443-849-3131 cancer, peds, adult
Fax: 443-849-2708 prenatal, 443-849-2919 cancer, peds, adult
Email address: AKimball@gbmc.org, mferguso@gbmc.org , JBILLIET@gbmc.org

Howard University (prenatal)
Supervisors: Barbara Harrison*
Address:
Howard University
520 W St, NW
Washington, DC 20059
Room 2026D
Phone: 202-806-6329
Fax: 202-806-7058
Email address: bwharrison@Howard.edu

Howard County General Hospital (prenatal)
Supervisor: Ashley Jachens (Low)*
Address:
Howard County General Hospital
5755 Cedar Lane
Columbia, MD 21044
Phone: 410- 720-8553
Fax: 410-720-8999
Email address: alow2@jhmi.edu

Inova Fairfax Hospital Cancer Center
Supervisor: Tiffani DeMarco, Kimberly (Rutledge) Matthijssen*, Dina Alaeddin, Morgan Turner
Address:
8081 Innovation Park Drive Suite #255
Fairfax, VA 22031
Phone: 571-472-0440
Fax: 571-472-0447
Email address: tiffani.demarco@inova.org; Kimberly.Matthijssen@inova.org;

Inova Inpatient pediatric, outpatient pediatric, and cardiovascular genetics
*Lucy Drayson (peds), *Jessica Merberg (Inpatient), Rebecca Miller (Becca), Ryan Hartman
Rebecca.Miller@inova.org
Jessica.Merberg@inova.org
Drayson, Lucy LDrayson@psvcare.org

JHU Adult Primary Care

Supervisor: Howard Levy* (MD, boarded in genetics)
Address:
10753 Falls Rd, Ste 325
Lutherville, MD 21093
Phone: 410-583-2774
Fax: 410-583-2883
Email address: hlevy3@jhmi.edu

JHU Cancer (breast/ovarian cancer), colorectal ca, general cancer
Supervisor: Dana Petry*, Katie Fiallos
Address:
Johns Hopkins Hospital
Dept Oncology
550 N Broadway, Ste 410
Baltimore, MD 21205
Email address: Dana Petry <dpetry1@jhu.edu>

JHU Center for Inherited Heart Disease (adult cardiology)
Supervisors: Brittney Murray*, Emily Brown*, Cindy James, Crystal Tichnell, Becky McClellan
Address:
Johns Hopkins Hospital

600 N Wolfe St., Blalock 545
Baltimore, MD 21287-0409
Phone: 443-287-5985 (Cindy), 410-502-7161(Crystal), 410-502-3616 (Brittney)
Fax: 410-502-9148
Email address: cjames@mail.jhmi.edu, ctichnell@jhmi.edu; bmurray@jhmi.edu (bdye1@jhmi.edu)

JHU Huntington's Disease Clinics
Supervisor: Weiyi Mu* Current contact is Debbie Pollard (Clinic Coordinator)
Address:
Dept Psychiatry
600 N. Wolfe St., 2-181 Meyer
Baltimore, MD 21287
Phone: 410-955-9573 (Rosenblatt), 410-502-6944 (Reading)
FAX: 410- 614-3676 (Reading)
Email addresses: wmu2@jhmi.edu

JHU Medical Genetics (peds)
Supervisors: Kelsey (Stauff) Guthrie*, Gretchen (Oswald) MacCarrick, Carolyn Dinsmore Applegate, Weiyi Mu, Christy Smith, Jackie (Francis) Britton, Krista Sondergaard Schatz,
Address:
Johns Hopkins Hospital
600 N Wolfe St, Blalock 1008
Baltimore, MD 21287
Phone: 410-955-3071
Fax: 410-614 9246
Email address: kstauff6@jhmi.edu
Notes: Case conference is Fridays, 9:30-10:30.

JHU Prenatal Diagnosis and Treatment Center (prenatal)
Supervisors: Christine (Chrissy) Hertenstein*, Cathy Lawson, Katie (Rock) Forster, Kristen Leppert
Address:
Johns Hopkins Hospital
600 N Wolfe St, Nelson Rm2-150
Baltimore, MD 21287
Phone: 410-955-3091
Fax: 443-287-2358
Email address: cbell42@jhmi.edu (Chrissy)
Clinic day(s): M, T, W (am), Th

Kennedy Krieger (pediatric)
Supervisors: Julie Cohen* (genetics), Anna Chassevent* (genetics), Alyssa Blesson (genetics), Rebecca McClellan (Becky) (metabolic), Dr. George Capone (Down syndrome), Dr. Naidu (neurogenetics), Dr. Alec Hoon (developmental pediatrician), Dr. Jay Shapiro (osteogenesis imperfecta), Jean Christianson (social work)
Address:
707 N. Broadway
Division of Metabolism
Baltimore, MD 21205
Phone: 443-923-2783
Fax: 443-923-2781
Email address: cohenju@kennedykrieger.org; chassevent@kennedykrieger.org

Lineagen
Supervisor: Stefanie Turner, Allie Ortega
Mountain time zone
Email addresses: Stefanie Turner <sturner@lineagen.com>; Allison Ortega <aortega@lineagen.com>
-Phone counseling only

Maryland Mercy Hospital (prenatal and cancer)
Supervisor: Jenna (Plamondon) Albrecht*, Amy Malinowski, & Patrick Semesky (Prenatal); Julie Solimine* & Amanda Roth (Cancer); Amanda Higgs is their senior GC
Address:
301 St. Paul Place
Center for Advanced Fetal Care, Tower Building
Baltimore, MD 21202
Phone: 410-385-5142
Fax: 410-244-0827
Email address: jplamondon@fpi.umaryland.edu, Amy.Malinowski@som.umaryland.edu, psemesky@som.umaryland.edu; jsolimine@som.umaryland.edu; aroth@som.umaryland.edu

Maternal-Fetal Medicine Associates of Maryland
Supervisor: Erin Moore
Address:
Phone: (301)-315-2227
Fax: (301)-315-2169
Email address: em@mfmofmd.com
Clinic day(s): daily

My GeneTeam
Lead contact: Laura Andolina landolina@mygeneteam.com
Supervisors: Amy Crowley (cardio), Catherine Griswold (prenatal), Lance Grau (cancer), others

NHGRI/NINDS/NICHD/NIAID/ all at National Institutes of Health
Supervisors: Morgan Similuk (Immunogenetics), Katie Lewis (ClinSeq), Don Hadley (consult service, holoprosencephaly, VACTERL), Ellen MacNamara (Undiagnosed Diseases Program), Margarita Raygada (Pediatric Genetics, NICHD), Julie Sapp (Proteus/GSPD), Natalie Deuitch (NHGRI); Alice Schindler (Neurogenetics; NINDS), Sandra Donkervoort (NINDS), Jennifer Sloan (Metabolic), Ann C.M. Smith (consult service & SMS),
Address: NIH campus
Phone:
Fax: 301-480-3108
Email address: Similuk, Morgan (NIH/NIAID) [E] morgan.similuk@nih.gov; Lewis, Katie (NIH/NHGRI) [E] katie.lewis2@nih.gov; Hadley, Donald (NIH/NHGRI) [E] dhadley@nhgri.nih.gov; Macnamara, Ellen (NIH/NHGRI) [E] ellen.macnamara@nih.gov; Raygada, Margarita (NIH/NICHD) [E] RaygadaM@mail.nih.gov; sappj@mail.nih.gov; schindlerab@mail.nih.gov; Sloan, Jennifer (NIH/NHGRI) [E] jsloan@mail.nih.gov; Smith, Ann (NIH/NHGRI) [C] acmsmith@mail.nih.gov; Calzone, Kathleen (NIH/NCI) [E] calzonek@mail.nih.gov; sandra.donkervoort@nih.gov, natalie.deuitch@nih.gov

NIDDK
Supervisor: James Welch*
Email address

NEI/NIH
Supervisors: Delphine Blain*, Aime Agather
10th floor CC, NIH campus
Phone: 301-496-1410 (Delphine)
Fax: 301-402-1214
Email address: dblain@mail.nih.gov, aime.agather@nih.gov

NCI
Kathy Calzone (NCI), Grace-Ann Fasaye (NCI), Alex Lebensohn, Margarita, Jessica Hatton, Megan Frone, Leila Jamal
grace-ann.fasaye@nih.gov

Sibley Memorial Hospital/St. Agnes (cancer and prenatal)
Supervisor: Reem Saadeh-Haddad (cancer); Jennifer Razak (prenatal) & Katelynn (Katie) Sagaser
Address:
Prenatal: St. Agnes Hospital
900 S Caton Ave
Baltimore, MD, US 21229
5255 Loughboro Road NW
Washington, DC 20016
Phone: 202-370-6546
Fax: 202-243-5271
Email address: RSaadeh@sibley.org; jweiss32@jhmi.edu;

St. Agnes Hospital
Supervisor: Hannah Eckl Osborn
900 South Caton Avenue
Baltimore, MD 21229-5299

Phone: (667) 234-3863
Fax: (667) 234-3563
Email address: Hannah.Eckl@ascension.org

Walter Reed National Military Medical Center (formerly National Naval Medical Center)
Supervisors: Jocelyn Knazik Phelps (prenatal); Dr. Clesson Turner (general genetics and peds); Dr. Juvi Estrada-Veras; Meagan Monte and Ashlee Vargason (cancer;); Fitz Doyle (cancer); Lydia Hellwig* (cardio, research)
Address:
Prenatal Assessment Center
Building 10, 6th floor
8901 Wisconsin Avenue
Bethesda, MD 20889
Phone:
Fax: 301-319-5047
Email address:
Lydia.hellwig.ctr@usuhs.edu
ashlee.b.vargason.ctr@mail.mil
jocelyn.c.knazikphelps.civ@mail.mil
joseph.f.doyle31.ctr@mail.mil
Clesson.E.Turner.mil@health.mil

Washington Hospital Center (cardiology)
Supervisor: Monisha Kisling
monisha.s.kisling@medstar.net

York Cancer
Amanda Matchette, MS, CGC
Licensed/Certified Genetic Counselor
WellSpan Health Cancer Centers
Phone: 717-741-8166
Fax: 717-741-8638
Email: amatchette@wellspan.org

Guidelines for Student Audiotaping in Clinic

Students are required to audio record any visit in which they take an active role, unless the patient declines to have the session recorded. These recordings will be reviewed within the context of professional supervision. In order to protect patient privacy and confidentiality, the following guidelines should be strictly followed:

1. All recordings should be transferred to an encrypted NIH laptop the same day, while in clinic, and deleted from recorder before leaving clinic.
2. Audio recorders should be kept safe. They should not be left unaccompanied and should never be left where someone could pick them up.
3. Students should ensure that they ALWAYS check that they have their recorder at clinic when they arrive and in their possession when they leave.
4. Recordings must be deleted at the end of each academic year and upon completion of the program in the third year.
5. If the recorder is malfunctioning, the laptop or a smartphone may be used to record the session. In the event that a smart phone is used, the recording must be transferred to the NIH encrypted laptop before leaving the clinic and deleted from the phone.
6. Prior to beginning recording, students should obtain consent from the patient(s) either verbally or in writing (as required by the specific clinical setting).
7. Students should verbally confirm consent when turning on the recorder by saying, "thank you for agreeing to the recording of our discussion."
8. Although on rare occasions recorders fail, there is no excuse for not having extra batteries in the clinic and replacing them if needed.
9. Digital files should be noted only by date and time.

Audio Recording Consent Forms (see next page)

The Johns Hopkins University / National Institutes of Health
Genetic Counseling Graduate Program

Department of Health, Behavior and Society

National Institutes of Health
10 Center Drive - MSC 1792
Building 10, Room 8D54A
Bethesda, MD 20892

Lori Erby, PhD, ScM
Program Director
(301) 443-2635 Fax: (301) 480-3108

Megan Cho, ScM
Associate Director
(301) 655-4551 Fax: (301) 480-3108

Dept. of Health and Human Services

National Institutes of Health

Audiotape Consent Form

Purpose
The purpose of recording the genetic counseling session is for the training of the genetic counseling intern. The audio recording will be reviewed solely by the genetic counseling intern and his/her supervisor. The focus of the review will be on the content of the session as supplied by the genetic counseling intern.

Risks
The risks are minimal. Your name will not be linked with the audio recording, and it will be destroyed after the genetic counseling intern reviews it with his/her supervisor.

Voluntary
Audio recording is completely voluntary, and you may choose to stop recording at any time. Your consent or non-consent to recording will not affect the care you receive at this center.

I give my permission to audio record my genetic counseling session.

_____
Patient Name

_____ _____
Signature Date

INOVA


1GENCNT

I authorize the genetic counseling intern with whom I am working to audiotape my genetic counseling session at Inova for the purpose listed below.

Purpose
The purpose of recording the genetic counseling session is for the training of the genetic counseling intern. The audiotape will be reviewed solely by the genetic counseling intern and his/her genetic counseling program supervisor. The focus of the review will be on the content of the session as supplied by the genetic counseling intern.

Voluntary
I understand that audiotaping is completely voluntary, and I may request that the recording be stopped at any time. I understand that my consent or non-consent to audiotaping will not affect the care I receive at Inova.

I understand I may revoke my authorization to use the audiotape by contacting:
- ☐ Inova Cancer Genetics Program: (703) 698-2491
- ☐ Inova Fairfax Hospital Genetic Counselors: (703) 776-2822

I am aware that my cancellation will not be effective as to disclosures already made in reference to this authorization.

I understand that if the person or agency that reviews the audiotape of my genetic counseling session is not a health care provider or health plan covered by the HIPAA privacy regulations, the information described above may be redisclosed and is no longer protected by these regulations.

I give my permission to audiotape my genetic counseling session.

_____ _____ _____
Patient (signature) Date Time

_____ _____
Witness (signature) Date Time **Witness** (print name)

PATIENT IDENTIFICATION

If label is not available, please complete:

Patient Name: _____

Date of Birth: _____ Medical Record # _____

Gender: ❑ Male ❑ Female

Inova
Authorization to Audiotape Genetic Counseling Session for Educational Purposes

CAT # 20465DT/R092217 • PKGS OF 100

Student Rotation Travel Reimbursement Policy

This is the official policy of the program on reimbursement for costs incurred associated with your rotations. **All institutions affiliated with JHU/KKI or the NIH/Walter Reed (your official duty stations) are not subject to any reimbursement.** Travel is eligible for reimbursement during the academic year in the following instances:

- Rotation site is 30-39 miles from your residence = parking eligible (if applicable)
- Rotation site is ≥40 miles from your residence = parking (if applicable) & mileage eligible
- Public transportation = eligible for up to 10% above what it would cost you to drive using the above guidelines

Logistics for obtaining reimbursement:

- You must keep all parking and public transportation receipts. **Submit voucher expense worksheet (see inside.genome.gov) and any receipts to Ellie within five business days of the end of your rotation****
- If choosing public transportation over driving, provide the calculations used to meet the eligibility criteria (in above section)
- If using a MetroCard, you must use your own (not a borrowed/shared one)
- Travel reimbursements take anywhere between 2-3 weeks for administrative approval and an additional 30 days to receive payment

Other important notes:

- Summer rotation travel is NOT eligible for reimbursement
- Tolls are NOT eligible for reimbursement
- Please do not make requests for additional travel reimbursements as they are in violation of the NIH travel policies and we cannot honor them
- At least one month prior to starting any new rotation you think may be eligible for reimbursement, revisit this document and do any calculations, that way you can plan ahead and ask questions in advance

Calculating mileage to be reimbursed

After you have determined you are eligible for mileage reimbursement, using the ≥40 miles guidelines listed in the main document, please follow these steps:

1. Determine if you live further from the NIH or further from the BSPH campus
2. Using whichever is the furthest campus (NIH or BSPH), determine the mileage from that campus to the rotation site that is eligible for reimbursement
    a. Use Google maps to find the shortest mileage of the driving options and select that – take a screenshot and note the mileage. **This is the amount of mileage you will be reimbursed**

Example:

1. Mary lives at 910 N. Calvert Street in Baltimore. The further campus is NIH.
2. Mary is traveling to Inova Fairfax hospital for her rotation which is 16.2 miles from NIH; she will be reimbursed at the government rate for 16.2 miles one way/32.4 round-trip.

Practice-Based Competencies for Genetic Counselors

https://www.gceducation.org/wp-content/uploads/2019/06/ACGC-Core-Competencies-Brochure_15_Web_REV-6-2019.pdf

This document defines and describes the twenty-two practice-based competencies that an entry-level provider must demonstrate to successfully practice as a genetic counselor. It provides guidance for the training of genetic counselors and an assessment for maintenance of competency of practicing genetic counselors. The didactic and experiential components of a genetic counseling training curriculum and maintenance of competency for providers must support the development of competencies categorized in the following domains: **(I) Genetics Expertise and Analysis; (II) Interpersonal, Psychosocial and Counseling Skills; (III) Education; and (IV) Professional Development & Practice.** These domains describe the minimal skill set of a genetic counselor, which should be applied across practice settings. Some competencies may be relevant to more than one domain. *Italicized words are defined in the glossary.*

Domain I: Genetics Expertise and Analysis

1. **Demonstrate and utilize a depth and breadth of understanding and knowledge of *genetics* and *genomics* core concepts and principles.**
2. **Integrate knowledge of psychosocial aspects of conditions with a genetic component to promote *client* well-being.**
3. **Construct relevant, targeted and comprehensive personal and family histories and pedigrees.**
4. **Identify, assess, order, facilitate, and integrate genetic/genomic testing options in genetic counseling practice (including molecular and non-molecular testing that directly impacts assessment of inherited risk).**
5. **Assess individuals' and their relatives' *probability of conditions with a genetic component* or carrier status based on their pedigree, test result(s), and other pertinent information.**
6. **Demonstrate the skills necessary to success- fully manage a genetic counseling case.**
7. **Critically assess genetic/genomic, medical and social science literature and information.**

Domain II: Interpersonal, Psychosocial and Counseling Skills

8. **Establish a mutually agreed upon genetic counseling agenda with the client.**
9. **Employ active listening and interviewing skills to identify, assess, and empathically respond to stated and emerging concerns.**
10. **Use a range of genetic counseling skills and models to facilitate informed decision- making and adaptation to genetic risks or conditions.**
11. **Promote client-centered, informed, non- coercive and value-based decision-making.**
12. **Understand how to adapt genetic counseling skills for varied service delivery models.**
13. **Apply genetic counseling skills in a culturally responsive and respectful manner to all clients.**

Domain III: Education

14. **Effectively educate clients about a wide range of genetics and genomics information based on their needs, their characteristics and the circumstances of the encounter.**
15. **Write concise and understandable clinical and scientific information for audiences of varying educational backgrounds.**
16. **Effectively give a presentation on genetics, genomics and genetic counseling issue**

Domain IV: Professional Development & Practice

17. **Act in accordance with the ethical, legal and philosophical principles and values of the genetic counseling profession and the policies of one's institution or organization.**
18. **Demonstrate understanding of the research process.**
19. **Advocate for individuals, families, communities and the genetic counseling profession.**
20. **Demonstrate a self-reflective, evidenced based and current approach to genetic counseling practice.**
21. **Understand the methods, roles and responsibilities of the process of clinical supervision of trainees.**
22. **Establish and maintain professional interdisciplinary relationships in both team and one-on-one settings, and recognize one's role in the larger healthcare system**

Technology Guidelines and Best Practices

Many resources from both Johns Hopkins and the NIH are available for students with respect to technology, which can sometimes be overwhelming. The purpose of this document is to reduce that confusion, outline best practices, and highlight the circumstances in which there are strict requirements for confidentiality that must be followed.

GUIDANCE ABOUT LAPTOP COMPUTER USE

All students are provided a laptop from the NHGRI for the duration of their time in the program. It is recommended that students use this computer as their default computer for coursework and clinical rotations. NHGRI computers come with the following software installed: Microsoft Outlook, Microsoft Teams, Microsoft Office Software, Adobe Acrobat, R, Endnote. To install additional software, you will need to contact NHGRI's IT support desk.

Students can use their own personal laptops. However, certain resources can only be accessed using an NIH laptop.

UNDERSTANDING YOUR NIH ID BADGE ("PIV Card")

Your NIH ID badge contains a chip which inserts into your NIH laptop (and other NIH computers). We refer to this as your SmartCard or PIV Card. You must use your PIV card to log into certain NIH applications, trainings, and websites, including NIH Library resources and most mandatory NIH trainings. Your PIV card also needs to be inserted in order for you to access the NIH VPN network. Although you do not need your PIV card to access regular NIH email, you will only be able to read encrypted NIH emails when your PIV card is inserted. For more information about your PIV card, please see here.

GUIDANCE ABOUT EMAIL USE

Students may use **one default e-mail address** of their choice for program correspondence. That said, it is still mandatory to check both your Johns Hopkins email account and your NIH email account at least once per week. To facilitate this, we strongly recommend that you use Microsoft Outlook on your NIH Laptop to check both accounts using one common interface. Please note that most instructors rely on Microsoft Outlook to coordinate their schedules, and as such, using Microsoft Outlook and Outlook calendar invitations to correspond with faculty is highly encouraged.

If you prefer to have your Johns Hopkins email forwarded to another email account, you may do this. However, please note that you will NOT be able to have your NIH email forwarded to any other account. To add your JHU account to Outlook on your NIH laptop, open Outlook, select "File", "Add Account".

Emails sent to your Johns Hopkins email address by default may include: Announcements about events, seminars, and dissertation defenses; notifications about password updates; updates from the Johns Hopkins Institutional Review Board (IRB); notifications about mandatory Johns Hopkins trainings; updates from the bursar and registrar's office, and school policy updates.

Emails sent to your NIH email address by default may include: Announcements about events, seminars, and academic talks of interest; notifications about password expiration; IT updates; notifications about mandatory NIH trainings (failure to complete these will result in a revocation of your NIH ID badge); updates from the NIH Institutional Review Board (IRB).

Hopkins email addresses become deactivated 6 months after graduation. Students must save any contacts, emails, and OneDrive/Box content during this period. For more information, see here. One option to transfer all

emails/OneDrive data from the .edu email in its deactivated grace period to a different account is VaultMe (formerly GradGopher); prices range from $13+ for transferring the content.

Upon deactivation, the @jhu.edu/@jhmi.edu email alias will automatically forward to a student's new Hopkins alumni email account, which must be activated during the 6 month grace period after graduation.

NIH email addresses become deactivated at the end of your fellowship. Please ensure that you have any personal data saved prior to this time.

SECURE EMAIL SERVICES

When students need to send confidential information, there are three options: Students can encrypt emails using their NIH email address, use Secure Email and File Transfer (SEFT), or use NIH Box.

In Outlook, encryption abilities are installed on students' NIH laptops upon receipt. Please see this article on how to encrypt emails from your NIH account in Outlook.

Students must request SEFT access here in order to send messages through SEFT. Students can receive messages sent through SEFT, however, without filling out this form.

To request an NIH Box account, please visit https://boxaccount.nih.gov

COLLABORATIVE WORK AND FILE SHARING

There are several options for collaborating with faculty. At NIH, many will use Microsoft Teams. The same may be true of JHU faculty, although faculty at the two institutions may not be able to collaborate easily with each other through the two separate institutions' Teams sites (JHU has more open outside sharing policies than does NIH). Each student will have access to Teams at both institutions.

The JHU/NIH GCTP also has a Sharepoint Site that houses important program-related documents. https://my.jhsph.edu/sites/HBS/GCTP/SitePages/Home.aspx

Johns Hopkins and NIH both provide each student with separate OneDrive accounts. At JHU, OneDrive is linked to their JHED address. At NIH, it is linked to the NIH login. At Johns Hopkins, OneDrive allows for file-sharing with the ability to tweak the sharing permissions for invited collaborators. OneDrive is HIPPA-compliant, approved for FERPA data, and includes encryption at rest. OneDrive at JHU can be accessed via my.jh.edu. At NIH, OneDrive is configured to allow for internal but NOT external file sharing.

It is important to discuss with your thesis advisor the preferred mechanism for sharing files.

Supervision Tracking

Students need to keep track of their 1:1 professional supervision documents (consents, supervision summaries, etc). These need to be shared with your primary supervisor and with Lori. You may share these by email or a collaboration folder, but please be sure to discuss how you will share when you start supervision.

Advising and Thesis Meetings

You will be assigned an academic advisor in the first term of your first year. Your academic advisor will answer questions about your coursework and other academic interests. You are required to meet with your academic

advisor once per term and must keep a log of these meetings. Please track these meetings using the following format:

Date	Meeting Topic	Duration	Individuals Present	Notes
01/2021	Learning about elective coursework	45m	Student and Faculty Member Name	Decided not to take any electives in third term
03/2021	Planning for summer	1h	Student and Faculty Member Name	Decided to apply for summer rotation in NJ

After each meeting, please send an update using this format to Ellie, who will ensure that it is included in your student record.

In the fourth term of your first year, you will be asked to identify a thesis advisor. Guidance about this process will be provided to you through your thesis proposal development coursework in the third and fourth terms of first year. Once you have a thesis advisor, you may stop meeting with your academic advisor. You will begin to meet regularly with your thesis advisor instead. Please log your thesis meetings using the same format (using a new tab) and save within your "Academic Meeting Log".

GUIDANCE ABOUT USE OF GOOGLE DRIVE

In our experience, many students and faculty rely on Google Drive for collaborative work and file sharing. This is permitted as long as INDIVIDUALLY IDENTIFIABLE DATA ABOUT PATIENTS OR RESEARCH PARTICIPANTS IS NOT STORED OR SHARED VIA GOOGLE DRIVE. However, we encourage you to share files through Teams or other approved mechanisms to the extent possible. If you choose to use Google Drive, consider copying a link to shared documents in your Teams folder so that it is easy for your advisor to locate.

COURSE CORRESPONDENCE AND GRADES

Most of your course correspondence at both NIH and the Johns Hopkins School of Public Health will occur via the Johns Hopkins CoursePlus site. Please familiarize yourself with CoursePlus and complete the Introduction to Online Learning training available here. Some instructors may prefer to correspond with you via e-mail; however, all course assignments and grades will be posted in CoursePlus. Please make sure the e-mail on file for your CoursePlus account is the one you wish to use for correspondence about coursework, assignments, and grades.

Tech support for CoursePlus is provided via the Center for Teaching and Learning and is available here.

The NIH FAES courses use Canvas instead of CoursePlus.

Courses offered outside NIH and the Johns Hopkins School of Public Health may use other forms of course correspondence (eg. ; elective coursework).

For these courses, please clarify the instructor's preferred form of communication at the start of term.

CLINICAL CASE LOG AND ROTATION EVALUATIONS
These are completed through an internet system called Typhon. Prior to your first rotation, you will be sent a username and login in order to access this system. Further details can also be found in the Rotation Orientation document here.

PRINTING
Printing is free and limitless at the NIH. Students can also print 1,000 pages without cost at Johns Hopkins.

CALENDAR
Meetings with faculty from either institution should be sent through Outlook and should include a meeting location. If the meeting is virtual, always include the link to Zoom or whichever platform you are using.

CalendarBridge is a cloud-based tool that syncs your calendars across Google Calendar, Microsoft 365 (Outlook), and other platforms. Because students have separate calendars for each email address, CalendarBridge can be a useful investment to show all appointments from across your various calendars. With an annual subscription, the cost of CalendarBridge breaks down to $4/month.

VIDEOCALLS
Each student has a basic Zoom account through Johns Hopkins that will allow for one-on-one meetings as well as group meetings that are less than 40 minutes in length. Through the NIH, you also have access to WebEx and Microsoft Teams for virtual meetings.

Faculty at Hopkins typically use Zoom for videocalls, while faculty at the NIH may use Zoom, Webex, or Teams.

IT ASSISTANCE
For IT assistance at NIH, students can submit a ticket here. Please note that you must be connected to VPN to submit a ticket. If you cannot connect to VPN, you can call the IT HelpDesk at (301) 496-4357.

The Johns Hopkins University / National Institutes of Health
Genetic Counseling Graduate Program

National Institutes of Health
10 Center Drive
Building 10, Room 8D54A
Bethesda, MD 20814

Program Director
Lori Erby, Ph.D, ScM (301) 443-2635 Fax: (301) 451-3455

Thesis Guidelines and Timeline

Purpose of the master's level thesis and criteria for approval

The thesis prepares students for conducting research as a genetic counselor. It must be original, feasible and likely to make a worthwhile contribution to the field. Students take a written comprehensive examination to demonstrate development of research competencies prior to finalizing a thesis proposal. This written comprehensive examination fulfills the Department of Health, Behavior and Society's comprehensive examination requirement. Students defend the thesis proposal orally and in writing to the program's Executive Committee prior to submitting to the Institutional Review Board (IRB).

PART 1: THESIS PROPOSAL DEVELOPMENT AND COMPREHENSIVE EXAMINATION (Years 1 and 2)

Developing a thesis idea

Students develop ideas for theses in a variety of ways. Many program faculty are actively engaged in research and have outlined relevant research gaps that may guide students toward question. Some students come to the program with research ideas. Others may recognize gaps in the professional literature in their classroom work or in working clinically with families. In the first year, the third term Introduction to Genetic Counseling Research ("Research Tapas") class is intended to expose students to a variety of researchers from both institutions to facilitate this process.

Scope of Work

Student projects may involve asking your own independent question or collaborating with existing faculty on a novel project. The thesis may incorporate one or several of the following: primary data collection and analysis, secondary data analysis, quantitative methods, and qualitative methods. The thesis may fall within various disciplinary areas related to genetic counseling including: health communication, genetic counseling outcomes, implementation science, behavioral economics, health services research, counseling psychology, and ethical/legal/social issues.

Research Expenses

Students have a budget of up to $5,000 for their research and are expected to track their expenses and not exceed this allotment. These funds are part of the program's research budget, and charges are made (with permission) to the program's account via an administrator, such as the NIH program coordinator. On occasion thesis advisors have other sources of research money that can be spent on student research. A budget proposal is due to program leadership at the time of IRB submission.

Written Comprehensive Examination

In addition, between the oral exam and the second week of January, the student's advisor will compile four remaining questions based on those raised in either the initial written evaluation or during the oral examination. Responses to these four questions will serve as the written component of the comprehensive exam. The student will have 2 weeks to complete the written response to this document. Within two weeks of receipt, two reviewers from the Executive Committee, other than the student's advisor, review responses to the four questions to arrive at a final decision about whether the student has passed the written exam, received a conditional pass, or failed.

Thesis Committee Selection

There are four levels of involvement a faculty member or other mentor may have in a student thesis project: 1) Advisor of Record, 2) Committee Member, 3) Collaborator and 4) Thesis Reader. Students select their own thesis committees and collaborators with guidance from the research advisor. However, Executive Committee faculty members often make suggestions to students.

1. *Thesis Advisor of Record:* The student's thesis advisor of record is the primary mentor for a student's thesis project. All decisions about a student's thesis topic, proposal, committee composition, involvement of collaborators, study execution, selection of readers, and manuscript preparation must be agreed upon by the student and their thesis advisor. The following individuals are eligible to be primary advisors for a student thesis project: Megan Cho, Lori Erby, Kathy Helzlsouer, Leila Jamal, Cynthia James, Bill Klein, Chenery Lowe, Jill Owczarzak, Debra Roter, and Julie Sapp. Students should note that **most** of these advisors will not have the bandwidth to work with more than one student in a given cohort.

2. *Thesis Committee Members:* Thesis committees consist of two to three faculty members (including the advisor) selected because they are interested in the topic and are able to provide substantive assistance to the student in developing and carrying out the project. At least **two members of the thesis committee (including the thesis advisor)** should be members of the Executive Committee **(ideally, one from NIH and another from JHU).** Current Executive Committee members include; Sara Benjamin-Neelon, Les Biesecker, Joann Bodurtha, Megan Cho, Julie Cohen, Lori Erby, Kathy Helzlsouer, Leila Jamal, Cynthia James, Donna Krasnewich, Bill Klein, Howard Levy, Chenery Lowe, Jill Owczarzak, Debra Roter, Julie Sapp, and Chuck Venditti. Additional investigators who have served on committees include: Mary Catherine Beach, Benjamin Berkman, Vence Bonham, Janice Bowie, Kathy Calzone, Megan Frone, Katie Lewis, Ellen MacNamara, Debra Mathews and Susan Persky. Any experienced investigator at NIH, Johns Hopkins, or outside institutions is potentially eligible to serve as a committee member – please consult with your thesis advisor for further guidance about this.

3. *Thesis Collaborators:* Thesis collaborators are additional research mentors who may be faculty members at Johns Hopkins (including outside HBS), the NIH, or outside institutions. They may also be genetic counselors, other clinicians, patient advocates or representatives of communities for whom a student's

research is relevant. While collaborators are NOT eligible to be thesis readers, they may provide substantive input on a thesis project and may be co-authors on any resulting publications. They are not expected to meet with the student as frequently as a committee member might, and their role is often a bit circumscribed (for instance, assistance with recruitment).

4. Thesis Readers

Thesis Proposal Development

Building on knowledge previously obtained in 410.615.01 "Research Design in the Social and Behavioral Sciences", the thesis proposal development course taught by Drs. Chenery Lowe and Lori Erby in the fourth quarter of the first year and first and second quarters of the second year assists students in preparing a thesis proposal that addresses a significant problem in the field of genetic counseling and makes an original contribution to the literature. It is also prepares students to present and defend the proposal to the Executive Committee. Students will also discuss the nature and content of the written comprehensive exam.

Written Exam Process and Evaluation

The written examination will be distributed to students during the first term of the second year in the program. Students will have six weeks to complete the written exam.

The written exam consists of five questions intended to assess students' understanding of research design and translation. Students will select three or more articles from a list of six articles curated by program leadership. The exam will be answered with reference to these articles. The exam will cover competencies in both qualitative and quantitative research, such as:

1. Research design, question development, and recognizing a gap in the literature
2. Strengths and weaknesses of different sampling approaches
3. Threats to internal/external validity and how these are handled similarly or differently in different types of research
4. Inferring implications and next additional research questions from study findings
5. Using conceptual frameworks in research

The written exam will be graded according to a rubric by members of the Executive Committee within two weeks of being completed by the student.

Oral Presentation Process and Expectations

The purpose of the oral presentation is two-fold: 1) To provide students with the opportunity to present their research plan to the Executive Committee, demonstrate their knowledge of research design, and discuss the decisions they made in their proposals and 2) To provide the Executive Committee with an opportunity to provide feedback on the proposals to help improve students' plan of work.

Students are expected to turn in a polished version of their current proposal two weeks prior to their scheduled oral presentation. The oral presentation will be scheduled for one hour. During that time, the

student is expected to prepare a 10 minute PowerPoint overview of their project and to respond to questions from four designated questioners from the Executive Committee.

Executive Committee members are expected to provide written feedback on the proposal to each student's advisor no later than 48 hours before the oral presentation so that students can consider/incorporate that feedback.

After the oral presentation, each student and advisor will receive final feedback about the proposed project. Each thesis advisor will consolidate the feedback and work with each student to provide a concise 1-2 page written response to feedback, to be submitted as soon after the oral presentation as possible and prior to IRB submission. This written response is meant to mirror the typical scientific review process at the NIH (and many other academic institutions) and is distinct from the Written Exam described above.

Quick Reference: **ScM Thesis Proposal Development - Milestones and Deadlines**

Milestone	**Deadline**
Develop a logbook of research ideas Meet with at least two potential advisors and committee members Complete Welch Informationist Training	End of 3rd Term of First Year (as part of Intro to GC Research)
Identify a topic and thesis advisor	End of 4th Term of First Year (as part of "Thesis Proposal Development I")
Submit a specific aims summary including aims, questions, proposed methods, and a justification supported by literature to Executive Committee	Mid-July between First and Second Years
Incorporate Executive Committee feedback	Late Summer/Early Fall of Second Year
Submit full proposal to Executive Committee	Late October-Mid-November of Second Year
Written examination	First term (Sept/Oct) of Second Year
Mock oral presentation	Late October-Early November of Second Year
Oral presentation to Executive Committee	Early November-Mid-December of Second Year
Submit IRB application (if applicable)	Third Term of Second Year
Begin data collection/study execution	Third/Fourth Term of Second Year

PART TWO: CONDUCT AND WRITEUP OF Sc.M. THESIS RESEARCH

After passing your written examination, presenting to the Executive Committee, and responding to any written feedback,you will be eligible to submit your proposal to the Institutional Review Board (IRB) for approval (if applicable). For specific guidance about the IRB review processes at Johns Hopkins and NIH, please refer to the IRB Guidance Document.

Conducting Research

After receiving notice of IRB approval, students will begin conducting their research using the procedures outlined in their study protocol. This work should begin by the fourth quarter of their second year in the program.

Students are expected to finish data collection by the **end of the summer heading into the third year. I**t is a good idea to set up recurring meetings with your thesis advisor and/or committee members throughout the summer between your second and third years. While you may also pursue an optional summer clinical rotation between your second and third years, it is important to make sure you carve out a significant bulk of time to work on your thesis during your second summer in the program.

Statistical Analysis Support

The student does data entry and analysis. Advice about, and confirmation of, data output can be sought from a statistician through BSPH (Brian Weir, bweir3@jhu.edu). . Once an initial data analysis is conducted, input should be sought from committee members about any further analysis that needs to be done and about data interpretation**. It is important that committee members have input into the analysis sufficiently early that their advice can be taken into account.** Most of the work in preparing the final written thesis for approval by the readers is done by the student working closely with the advisor.

Research Software

Statistical Software

STATA or R are the statistical analysis software packages you will become familiar with as part of the Biostatistics 620 course series in your first year of the program. For this reason, most students prefer to use one of these. Please discuss your data analysis plan with your advisor well ahead of analyzing your data to ensure that you have access to the correct software package. STATA and R are available via Johns Hopkins SAFE Desktop, which a Johns Hopkins member of your committee can set up for you.

Qualitative Analysis Software

MaxQDA is the preferred qualitative analysis software for students conducting qualitative research. You will become familiar with MaxQDA during "Theory and Practice in Qualitative Data Analysis and Interpretation" (Course # 410.712.01) in the third term of your second year. NIH owns several MaxQDA licenses which you can use.

If you prefer to use a different qualitative analysis software package, you may discuss this with your advisor. NVivo is available via the Johns Hopkins SAFE Desktop and the NIH may also be able to acquire an NVivo license for you.

Qualtrics and RedCap

Qualtrics and RedCap are the two survey platforms available to students via Johns Hopkins**.** Most previous students have used Qualtrics.

Other Software - Inquire

Students who need other software platforms for their projects should contact Dr. Lori Erby for guidance about additional options. It is best to start that conversation as early as possible, and certainly by the early summer.

IRB Guidance and Best Practices for Data Collection

Further FAQs and a guide to the Johns Hopkins Bloomberg School of Public Health's IRB review process can be found here. Information about the NIH IRB can be found here. Occasionally, students may find that it makes sense to use other Johns Hopkins IRBs. Students should work with their advisors to determine which IRB is most appropriate for submission.

Thesis Format

Students can choose between a publishable manuscript or a traditional thesis format. For **either** format, the following are necessary components of the write-up: 1) abstract; 2) an introduction section in which the background literature is completely summarized, the objectives of the study made clear (with or without hypotheses), and a rationale for the study and its design provided; 3) a methods section completely describing what was done, to whom it was done and methods of data analysis; 4) a results section; 5) a discussion/conclusions section indicating what was learned from the study in terms of the overall objectives and hypotheses, how the findings support or contradict published findings, and what the findings contribute to the field of study; and 6) the implications of the findings for the field of genetic counseling and ideas for future research.

For the manuscript style, a more extensive literature review is expected than what is typically included for a publication and may require a separate longer introductory chapter prior to the manuscript that has been prepared, but otherwise the format is streamlined and in the format and size for publication. The student should work directly with his or her advisor on the specific chapters to include, but it is often helpful to have an initial chapter that describes the aims of the larger work and introduces the manuscript, the manuscript itself, and a final discussion chapter that goes a bit beyond what may have been presented in the more streamlined manuscript (often focusing more fully on practice implications). The Bloomberg School of Public Health has guidelines dictating submission and layout of the thesis, title page, acknowledgements, table of contents, etc. that students need to obtain here and here.

Thesis Readers

Students need two thesis readers to approve their thesis. The request for the appointment of thesis readers should be submitted to the HBS Academic office at least **four** weeks prior to the expected completion date. However, for a December degree conferral, this must be done by the end of first quarter (please refer to the "Due Dates" document. **The aim is to choose a second reader who is already a thesis committee member as often as you can.** Early identification of readers and discussion with those not on the thesis committee is encouraged during thesis preparation.

The Bloomberg School of Public Health guidelines for thesis readers states that readers must meet the following criteria:

1. the readers must consist of **two voting members**; one of which is the student's advisor of record.
2. the second member must be a full-time (professor, scientist, lecturer, instructor of any rank), emeriti, or adjunct faculty from any BSPH or JHU department, including but not limited to HBS. This individual may not be a visiting faculty member.
3. only one adjunct faculty member may serve on the committee of thesis readers. If the advisor of record is an adjunct faculty member, the second reader may not be.

The student's thesis advisor must serve as a member of the readership. The thesis advisor may be from the National Institutes of Health with an adjunct appointment in HBS. Although one reader may be adjunct faculty, a second may be added only by way of a waiver signed by Senior Associate Dean for Academic Affairs. Because this waiver is at the Dean's discretion, a student who wants to have two adjunct faculty members to serve as readers should allow time to petition the Dean. Thesis forms may be accessed here.

Your advisor should have an opportunity to comment on your full thesis draft before you send it to your readers. After that readers need at least two weeks to review and approve the thesis. Many times there will be suggested revisions to be made with the counsel of the advisor. Please allow time to enter these comments prior to your submission deadline.

Final Thesis Submission and Approval

Once approved, the readers each write a letter indicating their approval to the Office of Records and Registration. Students then need to electronically submit their thesis following the previously mentioned guidelines. **After the thesis has been approved by the Eisenhower Library at Johns Hopkins, students should email the .pdf of the thesis to** BSPH-HBS Academic Program Administrator . Although we no longer require bound copies, students may purchase bound copies for themselves if they desire by uploading the .pdf at thesisondemand.com. Students must register for a minimum of two credits during the quarter in which they anticipate completing the degree program. Given this requirement, if they are not finished by the end of second quarter, they must register for the third quarter. Note that it is possible to extend the deadlines to the last day of the add/drop period for third quarter without having to pay third quarter tuition.

Additional information about submitting an ScM. thesis can be found here.

Given that some states now require a diploma to receive temporary licensure, we are strongly encouraging that students plan for a **December** degree conferral. As per the "Deadlines and Milestones" grid below, this requires that thesis letters and an approved electronic copy of the thesis has been submitted by the end of second term. Students should check the precise due dates BSPH-HBS Academic Program Administrator at the start of the first term of third year.

Final Thesis Seminar

During **January of the third year** of graduate studies, the student presents a scholarly seminar that includes the aims, methodology, findings, and discussion of their thesis research. This formal NIH seminar is required. A similar seminar presentation at Johns Hopkins is optional. Faculty and students are invited to attend. Traditionally, these seminars take place as part of the NIH GCTP graduation ceremony in January. Students are required to submit PowerPoint slides and to schedule a practice run-through of the final seminar with the advisor and/or program leadership at least 5 days before graduation is to take place.

Quick Reference: ScM Thesis Completion - Milestones and Deadlines – CHECK WITH OFFICE OF RECORDS AND REGISTRATION FOR SPECIFIC DATES EACH YEAR

Milestone	Deadline
Submit your graduation application to the Office of Records and Registration. This can be found in the SIS system. Select "Program of Study Info" from the Registration drop-down menu.	Mid-October of third year
Submit Thesis Readers Form (identifying your two readers) to Office of Records and Registration	Mid-October of third year

Submit Final Thesis Draft to Readers (after your thesis advisor has signed off on it)	Late November/Early December of third year
Thesis Readers Form Due to Office of Records and Registration	Mid-December of third year
Final Electronic Copy of Thesis (with correct formatting) Due to Sheridan Library	Mid-December of third year. (Please note that it may take up to 3 business days for the library to approve the thesis, so plan accordingly.)

Submitting your thesis to present at NSGC and for publication

You are expected to share your research on a national level upon graduation. This includes submitting an abstract to NSGC and submitting your thesis for publication. Upon graduation, you should have a longitudinal plan laid out with your advisor for which journal you are targeting, which aspect of your research you plan to write up and a general timeline. As you develop this plan, please attend to these guidelines:

Monitor the NSGC website for the Annual Conference abstract deadline (occurs very early) and plan to have your abstract ready one MONTH prior to the deadline. **First send the abstract to your thesis advisor for feedback and follow up with him/her as necessary.** Edit your draft based on that feedback. Then, send the document to all co-authors for input and approval. Co-authors **must** approve any presentation or publication and please avoid sending it to them at the last minute. You will need to double check required formats for:

- Listing authors
    - You are first author because you are writing the abstract or paper; you designed and conducted the work.
    - Your advisor is the last author, the place that represents the senior author if at NIH or possibly second author if at JHU (discuss this with your advisor).
    - Your committee members are co-authors and should be listed after you according to the degree to which they helped you with the study. If you have questions about including someone discuss it with your advisor. If that person had input into your study or its implications, she/he should be an author.
    - Other faculty who helped you, such as clinical supervisors, teaching faculty, Exec Com members, should be acknowledged at the end of your presentation or paper.
    - You are **never** to submit your study with you as the sole author because you did not conduct the study alone (this has happened or it wouldn't appear here).
- Listing affiliations
    - Do you use current affiliation or JHU or NIH? Many sponsoring organizations request that you list your affiliation from the time when the study was conducted. Thus, we suggest listing JHU/NIH GCTP. If your current employer would like you to acknowledge your current affiliation feel free to add it as well.
- Acknowledging your funding source.
    - You are **required** to place on a slide or within any poster or paper one of the following statements (two each year will be supported by NCI):

      "This research was supported by the Intramural Research Program of the National Human Genome Research Institute, National Institutes of Health."

OR

      "This research was supported by the Intramural Research Program of the National Cancer Institute, National Institutes of Health."

- Ensure that you meet the requirements for word count, font, and format when you submit your abstract.

Thesis Action Timeline

Refer to the JHU/NIH GCTP "Thesis Guidelines and Timeline" document for more detailed information.

Topic/Action Item	General Due Date	Specific AY Due Date: 2022-2023	Date Done ✓	Key Contact(s)	Notes/Comments
FIRST YEAR					
Students take Intro to GC Research course in 3rd quarter and "proposal development" in 4th quarter	Per class instructors			Lori Erby	Plan is to introduce 1st year students to thesis development before their 4th quarter. Chenery Lowe & Lori Erby manage this.
Select Thesis Advisor	By May			Chenery Lowe, Lori Erby, Academic Advisor	
Submit Interim Report to Executive Committee	July 15			Chenery Lowe	
SECOND YEAR					
Written Examination	Sept/Oct			Chenery Lowe, Lori Erby	The written examination will be distributed to students during the first term of the second year in the program. Students will have six weeks to complete the written exam.
Select Thesis Committee	By Sept			Chenery Lowe, Lori Erby	**Students select their own thesis committees**. However, Executive Committee faculty members often make suggestions to students. Thesis committees comprise about **two to three** faculty members selected due to interest in the topic and ability to provide substantive assistance to the student in developing and carrying out the project. At least **two members of the thesis committee (including the advisor)** should be *members of the Executive Committee* (ideally, one from NIH and another from JHU).
Submit draft thesis proposal to **Thesis** Committee	End of October	10/24/2022		Thesis Committee; Advisor	The proposal should be written in the "New Applications (PHIRST)" format required by the BSPH IRB, available at: https://www.jhsph.edu/offices-and-services/institutional-review-board/applications-and-forms/new-applications-phirst/index.html Or the relevant format for the NIH IRB found here: https://ohsrp.nih.gov/confluence/display/ohsrp/IRB+Templates

Topic/Action Item	General Due Date	Specific AY Due Date: 2022-2023	Date Done ✓	Key Contact(s)	Notes/Comments
Comments from Thesis Committee	Mid Nov.			Advisor	
Send thesis proposals to **Executive Committee**	Mid to late November latest	**TBD**		Chenery Lowe (JH), Lori Erby (NIH) & Advisor	Exec. Committee members *must receive final draft thesis* ***proposals at least two weeks in advance*** **of the early to mid December oral presentations at JHU or NIH.** Exec. Committee reviewers write up critiques prior to the student's oral presentation. The format used for written critique is that of the NIH Scientific Review Committee. All critiques are sent to the student's thesis advisor who, prior to the oral presentation, compiles them into one document to guide the student's preparation for the discussion. It is expected that most students will follow a timeline that allows for completion of the presentation on one of the pre-selected December dates.
Mock Oral Presentations	Late November	**TBD**		Chenery Lowe, Lori Erby	Each student will be asked to give a 10-minute presentation on an overview of their proposed research (just as in the Executive Committee) and respond to round-robin questions from Chenery, Lori, other faculty and classmates about the proposed research. Each student will be allotted approximately 45 minutes of question time. This occurs during the 2nd term course: Protocol Development in Genetic Counseling Research III
Oral Presentations	December	**TBD**		Chenery Lowe, Lori Erby	Some students (about ½ of class) present at JHU; remaining present at NIH.
Project Presentation in GC Seminar	Mid December	**12/23**		Lori Erby	Take place virtually on Fridays.
Written Response to Comments	January (end January latest)			Advisor; Exec. Committee reviewers	*Between the oral presentation and the second week of January*, the student's advisor will compile the feedback from the Executive Committee. The student will respond in writing, and this document will accompany any submission to an NIH IRB
IRB Submission	Jan. – April, as applicable			Lori Erby/NIH/NHGRI; Chenery Lowe/JHU; Leila Jamal/NIH/NCI	Following completion of the oral presentation and written response and approval of the thesis proposal by the student's thesis committee, the student **submits the protocol for IRB review.** Some students will submit for review to the **BSPH** IRB using the PHIRST system and following guidelines on this website: https://www.jhsph.edu/offices-and-services/institutional-review-board/index.html Note the tab to the left for "Student Projects." Refer to the IRB Guidelines document for specific details and deadlines.

Topic/Action Item	General Due Date	Specific AY Due Date: 2022-2023	Date Done ✓	Key Contact(s)	Notes/Comments
					Other students may submit to the NIH IRB. https://ohsrp.nih.gov/confluence/ This is a decision that should be made in consultation with the student's advisor. **Prior to submission to the IRB, the student must obtain approval of the protocol from her/his thesis advisor AND the PI on the IRB protocol.** The advisor and PI should be given *7-10 days minimum to review the materials.* The entire IRB review process may take as many as 8-10 weeks. The student submits his/her protocol to additional IRBs of collaborating institutions as necessary. The IRB office will often ask additional questions that need to be addressed prior to review. **Any changes made in response to these requests need to be approved by the thesis advisor AND PI** before submission.
Thesis Research Documentation Form	***After initial IRB approval obtained***			Melissa J. Cooke BSPH Academic Affairs mjcooke@jhu.edu BSPH-HBS Academic Program Administrator for "Coordinator" signature	Link for form: https://www.jhsph.edu/offices-and-services/institutional-review-board/_pdfs-and-docs/Thesis%20Form_07Mar2017.pdf *Sample email letter to students from Melissa Cooke*: "You passed your Written Comprehensive Exam on XXXX. By this time, your Thesis Advisory Committee should be formed and documented as directed by your department. It is your responsibility to ensure that you obtain the necessary research approval (either IRB for human subjects research or ACUC for animal research) on the appropriate approved protocol(s). Retroactive research approval for research involving human subjects and/or animals **cannot**, under any circumstance, be granted. Failure to obtain research approval will prevent you from publishing your thesis/dissertation. The following resources on obtaining research approval are provided for your reference:

Topic/Action Item	General Due Date	Specific AY Due Date: 2022-2023	Date Done ✓	Key Contact(s)	Notes/Comments
					Human Subjects: http://www.jhsph.edu/offices-and-services/institutional-review-board/student-projects/policies-for-students/ **Animals Research:** http://web.jhu.edu/animalcare Note: This form documents a student's IRB/ACUC approval and is signed by both the student advisor and the BSPH-HBSAcademic Program Administrator. The form must be sent electronically to Melissa Cooke (mjcooke@jhu.edu) so that it may be placed in the student's academic file.
Budget	Jan-Apr			NIH Program Coordinator – Ellie Younger	After submission to IRB, submit a proposed budget to Lori Erby, copying Ellie Younger. This will facilitate purchasing. Although purchases cannot be made until IRB approval has been obtained, it is helpful for Ellie to have this information as early as possible.
Collect data	Summer			Advisor	During the data collection phase, the student should keep her/his thesis advisor aware of progress and obstacles by meeting at least every other week. Students have a budget of $5,000 for their research and are expected to track their expenses and not exceed this allotment.
THIRD YEAR					
Finish data collection	August			Advisor; Statistician	Per current Thesis Guidelines and Timeline: Students are *strongly encouraged* to have *completed* data collection by the **start of their third year** in the graduate program. Students are to also keep other members of their thesis committees apprised of the status of the project. Data need to be properly stored according to the IRB guidelines. The student does data entry and analysis. Advice about, and confirmation of, data output can be sought from a statistician through BSPH (Brian Weir bweir3@jhu.edu).
*Thesis Research Documentation Form**	Refer to 2nd Year			Melissa J. Cooke BSPH Academic Affairs mjcooke@jhu.edu	**If not yet submitted during 2nd year*. See notes above under Second Year for detailed information.

Topic/Action Item	General Due Date	Specific AY Due Date: 2022-2023	Date Done ✓	Key Contact(s)	Notes/Comments
Submit thesis readers' names via signed/dated thesis reader form to JHU Office of Registration and Records* – *See "Notes/Comments"*→	Oct-Nov	**10/28/2022 – December degree conferral** **~11/15/2022 – May degree conferral** **(For spring conferral, no later than 3/17/2023, even if completing thesis after that date)**		1) For *initial review* of form regarding two thesis readers: BSPH-HBS Academic Program Administrator 2) For *submission* of form*: **Primary:** JHSPHEXAMS@jh.edu	1)) BSPH-HBS Academic Program Administrator signs/dates the thesis reader form confirming review of reader names only (p. 1). 2)Student must obtain *all* dated signatures on the *bottom part* of the form (p. 2), ***except*** the Associate Dean, prior to email submission to the JHU Office of Records and Registration. HBS Dept. Chair (for signature): **Doris Thomas (Dr. Rimal's assistant),** Associate Dean (for signature and processing): JHSPHEXAMS@jh.edu *Important note for any student who received a "Conditional Pass" for her/his written comprehensive exam– The student must **provide the specific date that he/she passed the written exam to JHSPHEXAMS@jh.edu .** Then a ***formal memo*** *from the department should be forwarded to that email address.* They are unable to process the thesis reader form without this information.
Submit abstracts & present posters at NHGRI symposium	Sept/Oct			Lori Erby	Symposium to be held in November. Given the timing, the poster is typically a works in progress poster.
Send final thesis to readers	**Fall** Conferral: 1st week Dec. *latest* **Spring** conferral: ~ January 15	**11/21/2023 (11/30 at the latest)** **1/13/22 (Spring conferral)**			Fall/Dec. Conferral – 11/21/22 recommended; 1st week Dec. latest; see immediately below Spring conferral: No later than January 18, but January 13 recommended.
Deadline for readers' letters to Registrar's office; .pdf of thesis uploaded to Eisenhower Library (& last day of add/drop for third quarter)*	**Fall/Dec**. conferral: ~ Mid to end December **Spring** conferral: ~ Feb. 1 (to avoid	**12/16/2022** **2/03/2022**		JHSPHEXAMS@jh.edu Advisor *Students should submit a pdf of the final document BSPH-HBS Academic Program*	For **fall** graduation, the deadline for submission of reader letters and all grades is the end of 2nd quarter (for AY 2022-23 year that is December 16th). Please remember that it may take several days for the library to accept the thesis, so please plan accordingly.

Topic/Action Item	General Due Date	Specific AY Due Date: 2022-2023	Date Done ✓	Key Contact(s)	Notes/Comments
	third term tuition)			*Administrator, copying Chenery Lowe.*	Per current Thesis Guidelines: Please note that the "Due Dates" document on that site provides a helpful list of tasks but with two sets of dates. Students in our program have the option of either a December conferral or a May conferral. Historically, most students have chosen to have a May degree conferral, but have completed the thesis such that they do not have to pay tuition for third or fourth terms during their third year. Given that some states now require a diploma to receive temporary licensure, we are strongly encouraging that students plan for a December degree conferral. As per the "Due Dates" document, this requires that thesis letters and an approved electronic copy of the thesis has been submitted by the last day of second term. Students should check the "Due Dates" document specific to their year of graduation for the specific date. The last possible date for submission of the thesis and thesis letters for a spring degree conferral is May 5, 2023. ***Summary**: Since some states that require proof of completion of the ScM before a GC is allowed to see clients, these timeline dates are based on a December conferral, unless a student needs an extra month for writing and analysis. This would allow the student to take advantage of the winter break and 3rd quarter add/drop period to avoid paying 3rd quarter tuition. **Students do NOT need to register for the third term in this case, but would be required to register and pay a late fee if they miss the add/drop deadline.**
Present thesis in graduation ceremony at NIH	January	**1/20/2023**		Advisor; Lori Erby	Per current Thesis Guidelines: Each student "presents a seminar that includes the aims, methodology, findings, and discussion of their thesis research. A formal NIH seminar is required. A similar seminar presentation at Johns Hopkins is optional. Faculty and students are invited to attend."
Transcripts & Certified Letters	January/February			Office of Records & Registration	Transcript Information: https://www.jhsph.edu/offices-and-services/student-affairs/records-and-registration/transcripts.html Letter from Registrar confirming graduation, even if Spring conferral, for those who need this for jobs: Registrar will process a

Topic/Action Item	General Due Date	Specific AY Due Date: 2022-2023	Date Done ✓	Key Contact(s)	Notes/Comments
					certified letter and send it electronically to each student requesting it.
Submit abstract to NSGC & submit thesis for publication	Upon graduation			Advisor	Per current Thesis Guidelines: "You are expected to share your research on a national level upon graduation. This includes submitting an abstract to NSGC and submitting your thesis for publication. Upon graduation, you should have a longitudinal plan laid out with your advisor for which journal you are targeting, which aspect of your research you plan to write up and a general timeline." "Monitor the NSGC website for the Annual Conference abstract deadline (occurs very early) and plan to have your abstract ready one MONTH prior to the deadline. **First send the abstract to your thesis advisor for feedback and follow up with him/her as necessary.**" "Edit your draft based on that feedback. Then, send the document to all co-authors for input and approval. Co-authors **must** approve any presentation or publication and please avoid sending it to them at the last minute."

Helpful Thesis Links

BSPH:

BSPH **"Masters Candidate Information"**:
https://my.jhsph.edu/Offices/StudentAffairs/RecordsRegistration/MastersCandidateInformation/Pages/default.aspx

BSPH Guidelines – Thesis:

https://www.library.jhu.edu/library-services/electronic-theses-dissertations/

https://www.library.jhu.edu/library-services/electronic-theses-dissertations/formatting-guidelines/

Thesis reader form:
https://my.jhsph.edu/Offices/StudentAffairs/RecordsRegistration/MastersCandidateInformation/Documents/ScM%20-%20MBe%20Appointment%20of%20Thesis%20Readers%20Form.pdf

- *Students can check faculty appointments by accessing*: https://www.jhsph.edu/faculty/directory/list/

BSPH Thesis Research Documentation Form: This can be found here:
https://publichealth.jhu.edu/offices-and-services/institutional-review-board-irb/student-research
BSPH IRB: https://www.jhsph.edu/offices-and-services/institutional-review-board/

BSPH PHIRST: Access it by clicking on the PHIRST Access link box in the top left corner here: https://www.jhsph.edu/offices-and-services/institutional-review-board/phirst/. Right below that access link is a newly created user guide. Submit all study actions (amendments, progress reports, etc.) for existing studies after you've activated them. Activation instructions: https://www.jhsph.edu/offices-and-services/institutional-review-board/_pdfs-and-docs/PHIRST_CompleteShellsGuide_2019-12-10.pdf.

BSPH IRB New Applications (under PHIRST): https://www.jhsph.edu/offices-and-services/institutional-review-board/applications-and-forms/new-applications-phirst/index.html

BSPH PHIRST 2.0 FAQs: https://www.jhsph.edu/offices-and-services/institutional-review-board/_pdfs-and-docs/PHIRST%20FAQS_12Nov2019.pdf

BSPH IRB Student Manual: https://www.jhsph.edu/offices-and-services/institutional-review-board/_pdfs-and-docs/Student%20Manual_V22_25Sep2019.pdf

NIH:

NIH IRB, electronic iRIS website:

https://irbo.nih.gov/confluence/display/IRBO/NIH+iRIS

Office for Human Research Protections (OHRP): https://www.hhs.gov/ohrp/

Protection of Human Subjects – 45CFR46: https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=83cd09e1c0f5c6937cd9d7513160fc3f&pitd=20180719&n=pt45.1.46&r=PART&ty=HTML

NIH Definition of Human Subjects Research & Related Infographics: https://grants.nih.gov/policy/humansubjects/research.htm

Other Required Activities

Post-clinic case conference (PCC)

Primary Goals

To provide a teaching forum for genetic counseling students and medical genetics fellows to present instructive cases that illustrate underlying principles or diagnostic challenges or counseling/ethical issues in clinical genetics.

To learn strategies for effective professional presentation, and to practice them and receive feedback.

Secondary Goals

To provide continuing education in clinical genetics for medical geneticists, genetic counselors, trainees, and interested colleagues and collaborators at the NIH.

Have fun! This is a great opportunity to learn more about a topic that you are curious about. For first year students, the topic may become the background for your thesis.

Time and Location

Wednesdays 1:30-2:30 PM

Bldg 50 (5th floor conference room), NIH Main Campus (still virtual; check format closer to date)

Contacts

Logistics

Suzanne Hart

Approval of topic, content and format for talk

Lori and Megan

Schedule of Presenters

See PCC Schedule available on the following page. Typically, GC students present in the Spring of their second year.

Format

Two different presenters, 1:30-2:00 and 2:00-2:30 PM present. The attending physician of the month will make introductions. Which presenter goes first can be negotiated prior to the conference with the attending physician or can be arranged between the two speakers at the start of the conference. The PCC uses a case-based format. The GC student selects a case that illustrates a counseling challenge or client struggle or areas of unaddressed clinical need.

Topic

The topic should be directly or indirectly related to genetic counseling. The selection of the case is the means by which the student selects a body of literature to review and synthesize for presentation. Because you will be immersed in the literature on whatever topic you choose, choose something that you think is interesting. The topic should be one for which there is a significant scientific literature. The intention is to summarize the research, ideally with the help of a review paper or two on the topic. A few qualitative studies or survey studies on a topic are insufficient. Lori and Megan would be pleased to discuss possible topics with you if you are unsure. If you have a chosen topic but no case to introduce it, it is okay to develop a case example.

Presentation

20-25 minute presentation with 5-10 minutes for Q&A, no more than 30 minutes total.

Plan to create approximately 25 slides for your presentation

Bring several copies of a reference list for any attendees who might be interested but do not make a References slide. Instead, for data slides, place an abbreviated reference at bottom.

Do not write out every word of your talk or read your slides as-is when you present. However, feel free to use notes or prompts.

What you say for each slide should differ from the text on the slide to keep the attention of the group.

Outline of slides (as a gentle guide not a rigid precedence):

Slide One-title of talk and presenter with GCTP affiliation

Slide Two-outline of presentation (do not include multiple copies of this slide)

Slide Three-Case presentation with pedigree

Slide Four-Medical details about the case

Slide Five-Differential diagnosis or event or reason for the topic—this should establish the theme of your talk

Slide Six-Start off literature review-define concepts that may be jargon to audience

Slides Seven to approx. slide 15-literature review with critical analysis of the data. This is your opportunity to demonstrate your ability to critique research findings. In closing on this series of slides, summarize what the literature you have reviewed tells us. There is no reason to apologize for a small or deficient set of findings. In those cases, the presenter's focus should simply be that what we can understand empirically about the topic is limited by scope or design of the studies that have been done to date. Place key references (only 1-3) as appropriate on the bottom of each slide that discusses the findings (last name of first author, year of publication and journal name). The audience assumes that you are providing a comprehensive review of the literature. So, it would be an oversight to rely on one review article or on one or two original research papers. If the literature on your chosen topic is huge, it is okay to use meta-analyses and reviews to help you condense and assess the findings, otherwise do a systematic literature search and summarize the data.

Slide 16 (approx)-Clinical implications of the research data

Slide 22 (approx)-Suggestions for providers. On the basis of the literature, what should a member of the audience do in a similar case?

Slide 23-Return to your case and tell us how it went or how the outcome relates to the literature you reviewed. Tie your whole presentation together by going back to where you started.

Slide 24-End with your take home message (don't call it this).

Slide 25-Thanks and offer an invitation to ask questions. The attending physician typically calls on attendees to ask questions.

Timeline

4 weeks before scheduled presentation

Get approval for your topic idea from Lori or Megan.

Begin to gather the research articles that you will need to synthesize.

2 weeks before your scheduled presentation

Contact Lori and Megan to schedule a prep session. If you cannot make a trip to NIH to do the pre-screen, then plan to do the talk with them by speaker phone/WebEx. The prep session should not be later than the Monday before your presentation.

By 9:00am on the Monday before your presentation

Send your slides to Lori/Megan so they have an opportunity to review them before the prep session.

After prep session

Incorporate recommended changes into the presentation.

Day before your presentation

Bring your talk on a stick as well as on your own laptop. There should be IT support for these conferences, but you may need to load your own talk.

Day of your presentation

Arrive 20 minutes early to the conference room. There may be a prior meeting, but it is likely that you can get in and get your talk downloaded ahead of time.

Tips-

If you get past PCCs from other students to review, use them for ideas only.

Go to PCCs before you are scheduled to present so you understand how the PCC runs.

Encourage your peers and NIH supervisors and anyone who you suspect might have expertise or an interest in the topic to attend so that you have familiar faces in the audience.

Dress nicely. Do not chew gum. This is a formal setting.

Do not hide behind the podium but don't dance around while you present either.

Expect to be asked questions about your topic and the literature that you have read. This means knowing the case and the studies beyond what you present. You may be asked for more details on the justification for your suggestions for providers and their implications. You will often get asked more about what it means clinically and how you might implement changes based on what you learned.

Consider doing a dry run with your peers who can fire questions at you for you to respond to.

Keep in mind that as a genetic counseling student you have better social engagement and communication skills than most speakers. Our students have a reputation for giving excellent presentations!

The most effective presentations minimize the amount of text on each slide. Slide presentations are primarily a visual medium, so use diagrams, charts, graphics, cartoons (minimally) and photos to support your points.

Being well prepared will allow you to have fun with this opportunity. Speakers who are enjoying themselves are much easier to listen to (and yes, it is normal to be a bit nervous!).

1 slide/minute is a good rule of thumb when planning a presentation.

Post-Clinic Case Conference Schedule

Wednesdays, 1:30-2:30pm, 5th floor conference room, building 50

2022-2023

Zoom Link: https://nih.zoomgov.com/j/1618527472?pwd=NTB1dS9SdFJ3aEpjeTZUcUFmSUxyUT09

Attending	**Dr. Yano**	Attending	Dr. Adams
July 6	Problems with Dr. Shchelochkov	January 4	Dr. Drew Michael
13	Problems with Dr. Regier	11	Cassini/Jerves Serrano
20	Problems with Dr. Merideth	18	Barajas/ Pemov
27	UCSC workshop	25	Leadem/Luperchio
Attending	**Drs. Biesecker, Shchelochkov & Solomon**	Attending	**Dr. Merideth**
August 3	Problems with Dr. Hufnagel	February 1	Rare Conversations ^
10	Problems with Dr. Hart	8*	Ethics (Dr. Hull)
17	Problems with Dr. Turner	15	Han/Ravindra
24	Problems with Ms. Babcock	22	Davidson/Jain
31	Wellness Wednesday		
Attending	**Drs. Biesecker and Shchelochkov**	Attending	**Dr. Rossignol**
September 7	Adams/Kozel	March 1	Rare Conversations
14	Ms. Babcock/Ms. Deuitch	8	Guille/Al-Saygh
21	Singh-Miller/Ullah	15	ACMG-No Conference (14-18)
28	Saeed/Wang	22	Leeson/Wilson
		29	Wellness Wednesday

Attending	**Drs. Introne and Manoli**	Attending	**Drs. Shchelochkov & Solomon**
October 5	Adams/Kozel	April 5	Rare Conversations
12	Kuo/Pan	12	Lin/May
19	DICE	19	M&M2
26	ASHG-No Conference (25-29)	26	Schopp/Stearns
Attending	**Drs. Manoli and Venditti**	Attending	**Drs. Shchelochkov & Solomon**
November 2	Dr. Josh Denny	May 3	Rare Conversations
9	Othman/Shi	10	Hernandez-Hernandez /Roux
16	Ethics (Mr. Berkman)	17	Montano/Yousaf
23	Thanksgiving-No Conference	24	DICE
30	Wellness Wednesday	31	Wellness Wednesday
Attending	**Dr. Turner**	Attending	**Dr. Franco**
December 7	Dr. Angela Grochowsky	June 7	Rare Conversations
14	M&M1	14	Truong/Cohen
21	Christmas-No conference	21	Graduation
28	New Years-No conference	28	M&M3

*National Inservice for residents and fellows

^Led by Drs. Ours and Shchelochkov

Journal Club

Students participate in genetic counseling journal club three times each year. Two of these occur during the Friday afternoon seminar (once in fall and once in spring). In the fall, program leadership leads the discussion. In the spring, second year students work together to lead the discussion, following the template demonstrated in the fall. In addition, there will be one journal club meeting at a faculty member's home in the spring. This journal club discussion will be led by the faculty member host. All students are expected to be active participants in each journal club. We often make use of small break-out groups to ensure that all students have an opportunity to actively participate.

Professional Development Seminar

There are several formal opportunities presented for students to work on specific aspects of professional development. In the spring of second year, the program holds a series of seminar to prepare students for the job search, including presentations by alumni who have been involved in hiring decisions and a review of career services resources. We also host a seminar of genetic counselors who have incorporated research into their careers. In the fall of third year, we host additional professional development seminars related to the business aspects of genetic counseling and opportunities to further counseling skills as a professional (addressing burn-out, compassion fatigue, and peer supervision).

NHGRI Research Symposium

All trainees within NHGRI are expected to participate in the annual NHGRI Research Symposium, which typically takes place in November. Third year students should watch for the NIH Program Coordinator to forward the call for abstracts. GCTP students most frequently present a poster. Given the timing, these are often presented as works in progress. Trainees will be provided with a template. While the poster should have a polished appearance, this should be as low intensity a process as possible, as the focus should be on completing the thesis. Please keep in mind that all co-authors will expect to review the abstract and poster well in advance (allowing for at least two weeks for each review).

NSGC Annual Conference

All second- and third-year students will be given the opportunity to attend the NSGC Annual Conference in the fall. Second year students will typically attend virtually, and third year students will have the option to attend in person. Rose Rada will assist with travel arrangements.

Supplemental Training Activities

There are often other **non-required** opportunities for additional learning on each campus. Some of these include the weekly NHGRI pre-clinical case conference on Mondays at noon, the Wednesday post-

clinic case conferences (even when our own students are not presenting), monthly dysmorphology conferences at NHGRI, NIH OITE activities, JH Med Genetics Rounds, and Research Seminars on both campuses. Among our shared Outlook calendars is an "Events of Interest" calendar. We will list these here. If you learn of an event that you would like to see represented, please let us know.

SOURCE

SOURCE is a community engagement and service-learning center for Johns Hopkins University Schools of Public Health, Nursing, and Medicine. SOURCE aims to engage JHU health professional schools and Baltimore communities in a mutually beneficial partnership that promotes health and social justice.

HBS Student Government

If you would like to get involved in Student Government at Hopkins you can get more information here- https://studentaffairs.jhu.edu/gro/

https://publichealth.jhu.edu/about/leadership/student-assembly

https://publichealth.jhu.edu/about/leadership/student-assembly/student-groups

Selected Genomics/Research Resources

Below is a list of resources that you will likely find useful throughout your training. Feel free to let us know if there are others you would like us to consider for this list.

Common Databases

OMIM is the Online Mendelian Inheritance in Man, a comprehensive compendium of human genes and genetic phenotypes.

GeneReviews is an international point-of-care resource for clinicians. It provides both clinically relevant and medically actionable information for inherited conditions in a journal-style format and is a great resource if you only have 10 minutes (or a reasonable refresher after having gone directly to the literature.

Genetic Test Registry (GTR) provides a central location for voluntary submission of genetic test information by providers. The scope includes the test's purpose, methodology, validity, evidence, of the test's usefulness, and laboratory contacts and credentials.

ClinVar gathers information about genomic variation and its relationship to human health. It includes a database of known genomic variants.

NIH Librarian

For help with a literature search strategy, you can reach out to a librarian here.
Joelle Morini is the NHGRI Research Librarian

JHU Librarian

To request help from a librarian at JHU/HBS, follow the following site https://publichealth.jhu.edu/offices-and-services/libraries