GENETIC COUNSELING
WHAT IS GENETIC COUNSELING?

- Genetic counselors are health care professionals who have specialized education and training in the field of medical genetics.
- Genetic counselors interpret family history information and educate patients and professionals about genetic diseases.
- As health care professionals, genetic counselors help individuals and families understand and adjust to a genetic diagnosis or the possibility of having a hereditary disorder. As specialized counselors, they help them understand genetic testing options and the implications of undergoing genetic testing, as well as address psychosocial and ethical issues associated with a genetic disorder or genetic test result.
- As members of a health care team, genetic counselors serve as educators to patients, physicians, other health care providers and society.

Courtesy of the Mayo School of Health Sciences
According to the US Bureau of Labor Statistics, employment is expected to grow 41% in the next ten years - much faster than the average for all occupations.

Results are according to the 2014 NSGC Professional Status Survey

Courtesy of the National Society of Genetic Counselors
SELECTED GRADUATE PROGRAMS

- Boston University School of Medicine
- Brandeis University
- Case Western Reserve University
- Emory University School of Medicine
- Johns Hopkins University/National Human Genome Research Institute
- Icahn School of Medicine at Mt. Sinai
- Northwestern University Medical School
- Stanford University School of Medicine
- University of Michigan
- University of Pittsburgh

For a complete list of programs: GCEducation.org/Pages/Accredited-Programs.aspx
HOW TO APPLY

- To become a genetic counselor, you must obtain a master’s degree from a program accredited by the Accreditation Council for Genetic Counseling.

- Prerequisites coursework varies and may include genetics, psychology, biology, chemistry, statistics, biochemistry.

- GRE test scores, personal statement, resume, letters of recommendation, and interviews are usually required.

- Some programs have their own application, others may require applying through a common application, like the SOPHAS.

- Personal experience in a counseling role and experience shadowing a genetic counselor are highly valued.
  
  → Find a Genetic Counselor to shadow online at the NSGC website

- Applications are generally due in December or January for matriculation the following fall.
# Sample Curriculum

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<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td><strong>Year 1</strong></td>
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<tr>
<td>• Embryology</td>
<td>• Medical Genetics</td>
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<td>• Molecules &amp; Cells</td>
<td>• Bioethics</td>
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<td>• Genetic Counseling I</td>
<td>• Genetic Counseling II</td>
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<td>• Introduction to Ethical Responsibility of Genetic Counselors</td>
<td>• Intro to Interviewing &amp; Counseling Methods</td>
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<td>• Ethical Issues in Clinical Research</td>
<td>• Culture, Illness &amp; Community Health</td>
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<td>• Biostatistics</td>
<td>• Clinical Rotations</td>
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<td><strong>Year 2</strong></td>
<td>• Psychosocial Supervision</td>
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<td>• Impact of Illness on Patients &amp; Families</td>
<td>• Thesis</td>
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<tr>
<td>• Genetic Counseling III</td>
<td>• Advanced Human Genetics</td>
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<td>• Practical Analysis of Your Personal Genome</td>
<td>• Clinical Rotations</td>
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Programs will include coursework in science, counseling, public health, and ethics, as well as clinical rotations to help students gain familiarity with potential areas of practice. Most programs include research opportunities.

Curriculum courtesy of [Icahn School of Medicine at Mt. Sinai](https://www.medsin.edu)
NEWS ARTICLES OF INTEREST

- Genetic Counseling: A Rapidly Growing STEM Career (National Society of Genetic Counselors Blog, 2014)
- Understanding the Role of the Genetic Counselor (NSGC Blog, 2014)
- Genetic Counseling: A Growing Field (San Francisco Chronicle, 2012)
- Lifeworks interview with genetic counselor Barbara Biesecker
FOR ADDITIONAL INFORMATION

- National Society of Genetic Counselors: NSGC.org
  - What is Genetic Counseling
  - Explore a Career as a Genetic Counselor
  - Simulated genetic counseling sessions (videos)

- American Society of Human Genetics: ASHG.org