## **Genetic Counseling**

What is genetic counseling? Genetic counselors work with families who have members with birth defects or genetic disorders, or are at-risk for such conditions. Genetic counselors gain an understanding of the underlying causes of disorders, the ability to interpret this information for the families, and the skill to aid families in preparing for their future.

**More details?** For more detailed information, including salaries and job prospects, visit the US Department of Labor, Bureau of Labor Statistics: www.bls.gov/Healthcare

**Can UWW help me prepare for an accredited genetic counseling school?** Absolutely! We offer the courses required for entry into a genetic counseling program, which fit well with requirements for a major or minor in biology, and the required and elective General Education courses.

- **1. Undergraduate degree (BS or BA):** Genetic counseling schools require students to have earned a college or university degree (BS or BA).
- 2. Major and minor: Applicants often have degrees in biology or psychology, or experience with healthcare. No matter what degree, the applicant will need extensive knowledge of biology, chemistry and math.
- 3. Coursework: Genetic counseling schools expect applicants to complete certain classes:

Requirement	Length/Credits (minimum)	UWW courses
		which meet the requirements
Chemistry	Min 1 year	CHEM 102 AND 104
Genetics	Min 1 course	BIO 251
Math	1 course	MATH 152
Biology (20 or more credits)	General biology (BIO 141 AND BIO 142), genetics (BIO 251), cell biology (BIO 253), human anatomy and physiology (BIO 361 and 362), microbiology (BIO 311), immunology (BIO 412), developmental biology (BIO 341)	

- 4. Exposure to genetic counseling: Students are expected to have exposure to genetic counseling, either by shadowing or speaking with a practicing genetic counselor. Students should consider gaining general experience in counseling, which can be met through volunteering with programs for peer counseling, crisis counseling, or domestic abuse programs. Students should have exposure to individuals with chronic illnesses or disabilities. This can be accomplished by volunteer work with Special Olympics or at camps for children with disabilities.
- 5. Entrance exam: Students may be required to take the Graduate Record Exam (GRE).

What happens then? After your professional education, you would receive a masters (MS) degree in genetic counseling. You would also need to take the appropriate certification exam. The school you attend will help you prepare.

**Professional organization:** Most genetic counselors belong to the National Society of Genetic Counselors (<a href="www.nsgc.org">www.nsgc.org</a>); this organization is an excellent source of information for everyone with questions about genetic counseling. To find accredited programs visit ACGC Accredited Program.

## Training in this area:

WI

University of Wisconsin-Madison (Madison, WI)

MS program <a href="http://www.med.wisc.edu/education/graduate-programs/genetic-counseling/main/26910">http://www.med.wisc.edu/education/graduate-programs/genetic-counseling/main/26910</a>

MN

University of Minnesota (St. Paul, MN)

MS program <a href="https://www.cbs.umn.edu/graduate-students/genetic-counseling">https://www.cbs.umn.edu/graduate-students/genetic-counseling</a>

IL

Northwestern University Medical School (Chicago, IL)

MS program <a href="http://cgm.northwestern.edu/education/graduate-genetic-medicine/index.html">http://cgm.northwestern.edu/education/graduate-genetic-medicine/index.html</a>