

The American College of Medical Genetics and Genomics Who We Are and What We Do

The American College of Medical Genetics and Genomics (ACMG) is the specialty society representing U.S. clinical and laboratory Medical Geneticists who are board certified by the American Board of Medical Genetics and Genomics, one of the 24 primary member specialty boards of the American Board of Medical Specialties. Fellows of ACMG are from four specialties: MD/DO Clinical Genetics and three MD or PhD laboratory specialties (Clinical Biochemical Genetics, Clinical Cytogenetics, and Clinical Molecular Genetics). ACMG's 1800 members also include genetic counselors, genetics nurses, and public health geneticists. It is the only nationally recognized medical organization dedicated to improving health through the practice of medical genetics and genomics.

Medical Genetics is the application of the principles of inheritance and our knowledge of human genes to diagnose, prevent, and treat diseases and improve health. It is an increasingly broad and unique specialty of medicine that encompasses all organ systems, periods of life and many disease entities. *Medical genomics* is the study of the genome in humans and the relationship of genes and environment in disease. Medical Geneticists diagnose and treat conditions that are or may be heritable or those that arise from a specific genetic change at the somatic level (for example cancer cells).

The delivery of genetic and genomic healthcare often requires the combined knowledge of the clinical and laboratory specialists who make up the Medical Genetics team. For individuals seeking a medical genetics evaluation with the anticipated outcome of establishing a diagnosis, the process may include genetic risk assessment and undergoing genetic or genomic testing — including interpreting the results of these tests in the context of the patient's personal and family health histories — resulting in recommendations specific to the genetic risk for that patient or diagnosis.

ACMG's mission is to provide leadership and resources to facilitate the delivery of high quality clinical and laboratory medical genetics and genomics services through:

- Clinical and Laboratory Practice: Establishing the paradigm of genomic medicine by issuing statements and evidence-based clinical and laboratory practice guidelines and through descriptions of best practices for the delivery of genomic medicine.
- Education: Providing education and tools for medical geneticists, other health professionals and the public and grow the genetics workforce.
- Advocacy: Working with policymakers and payers to support the responsible application of genomics in medical practice.

The specialty of Medical Genetics continues to evolve as new disorders are identified, new technologies become available, and new treatments become standard of care. As such, the ACMG has the capacity to remain nimble and continually adapt its policies and activities to meet the needs of Medical Geneticists and the patients, families and communities they serve.