

**ACGME Program Requirements for Graduate Medical Education
in Medical Biochemical Genetics
Summary and Impact of Focused Requirement Revisions**

Requirement #: Int.B.2.h)

Requirement Revision (significant change only):

Medical biochemical geneticists: identify emerging and experimental therapeutics for patients.

1. Describe the Review Committee's rationale for this revision: **Given that the fields of medical genetics and medical biochemical genetics are constantly evolving, the Review Committee wanted to include a mention of future therapeutics in which fellows may be involved.**
2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? **This requirement is part of the description of the specialty, and does not affect the function of the program, fellow education, or patient care/safety in any way.**
3. How will the proposed requirement or revision impact continuity of patient care? **This requirement is part of the description of the specialty, and does not affect continuity of patient care.**
4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? **The proposed revision will not necessitate additional institutional resources.**
5. How will the proposed revision impact other accredited programs? **The proposed revision will not impact other accredited programs.**

Requirement #: II.A.2.a)

Requirement Revision (significant change only):

The program director must be provided at least 0.1 FTE protected time for administration of the program. ^(Core)

1. Describe the Review Committee's rationale for this revision: **Since many medical biochemical genetics programs are small, the Review Committee felt that 0.1 FTE would be sufficient for these program directors to fulfill their administrative duties.**
2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? **Stipulating a specific amount of protected time will guarantee that program directors have time separate from other duties to provide administration to the program, as well as educating fellows.**
3. How will the proposed requirement or revision impact continuity of patient care? **Ensuring that the program director has protected time for administration of the program will allow for adequate oversight of teaching, as well as for encouraging and monitoring continuity of patient care.**
4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? **This proposed requirement may require additional institutional support in the form of protected time; however, most program directors likely already have at least 0.1 FTE protected time.**
5. How will the proposed revision impact other accredited programs? **The proposed revision will not impact other accredited programs.**

Requirement #: II.A.3.a).(1)

Requirement Revision (significant change only):

The program director should have at least three years of active participation as a specialist in biochemical genetics following the completion of all graduate medical education. ^(Detail)

1. Describe the Review Committee's rationale for this revision: **The Program Requirements for Medical Genetics and Genomics have a requirement for a minimum number of years of experience prior to appointment as program director. The Review Committee wanted to have similar requirements for medical biochemical fellowship program directors.**
2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? **Requiring time as a specialist in biochemical genetics prior to appointment as program director allows program director candidates time to practice biochemical genetics independently without supervision, as well to gain experience as a faculty member in a biochemical genetics program. This experience will give program directors a better working knowledge of how fellowship programs function, allowing them to better lead the faculty members and fellows.**
3. How will the proposed requirement or revision impact continuity of patient care? **Requiring at least three years' experience as a specialist in biochemical genetics allows faculty members time to provide patient care independently without supervision, which will likely increase their confidence in their patient care skills that they can in turn impart upon the fellows.**
4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? **The proposed revision will not necessitate additional institutional resources.**
5. How will the proposed revision impact other accredited programs? **The proposed revision will not impact other accredited programs.**

Requirement #: II.B.4.c)

Requirement Revision (significant change only):

There must be at least three core FTE faculty members, including the program director, with current ABMGG certification in medical biochemical genetics, clinical genetics and genomics, or clinical biochemical genetics. ^(Core)

1. Describe the Review Committee's rationale for this revision: **The Review Committee felt that three certified core faculty members would ensure appropriate faculty staffing and experience to educate the fellows, and allow for one-on-one fellow education and supervision as needed.**
2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? **Having at least three core faculty members ensures appropriate supervision and education of fellows. Additionally, having at least three core faculty members provides varying approaches to supervision and education.**
3. How will the proposed requirement or revision impact continuity of patient care? **Having at least three core faculty members ensures there is adequate and appropriate supervision of fellows at all times, positively impacting continuity of care.**
4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? **This may require additional institutional resources, if a program does not currently have a least three core faculty members.**
5. How will the proposed revision impact other accredited programs? **Some core faculty members may also be core faculty members in other programs within the genetics department/division. If that is the case, programs will need to determine how best to share or split core faculty duties.**

Requirement #: IV.C.1.a).(1)-(3)

Requirement Revision (significant change only):

[The program must ensure:]

adequate supervision during times of transition and hand-offs; (Core)

continuity of supervision at all participating sites; and, (Core)

fellows have exposure to and sufficient time in specialty clinics for residents. (Core)

1. Describe the Review Committee's rationale for this revision: **The Review Committee wanted to provide clarification for IV.C.1., which states that the curriculum must be structured to optimize fellow experiences and supervisory continuity. The Review Committee feels strongly that there should be adequate supervision during hand-offs and other transitions to ensure no information is lost. The Review Committee also feels clinics should be structured and scheduled to allow fellows to perform adequate patient care.**
2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? **Minimizing or eliminating information lost during transitions of care and hand-offs of patient information ensures accuracy and positively impacts patient care.**
3. How will the proposed requirement or revision impact continuity of patient care? **The proposed requirements will positively impact continuity by minimizing or eliminating unnecessary loss or transfer of information and encouraging continuity of patient care in specialty clinics.**
4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? **This may necessitate increased faculty supervision to ensure adequate transitions and prevent unnecessary loss of information.**
5. How will the proposed revision impact other accredited programs? **The proposed requirement will not impact other accredited programs.**

Requirement #: IV.C.9.b).(1-19)

Requirement Revision (significant change only):

[Programs must provide: structured education, including formal coursework in the basic sciences and clinical areas pertinent to biochemical genetics, to include:]

~~population and newborn screening;~~ (Core)

~~disorders of amino acids metabolism;~~ (Core)

carbohydrates; (Core)

cofactors; (Core)

creatine; (Core)

~~disorders of fatty acid oxidation;~~ (Core)

~~galactosemia;~~ (Core)

~~glycogen storage diseases;~~ (Core)

lipids; (Core)

~~lysosomal storage diseases and lipidoses;~~ (Core)

metals; (Core)

~~mitochondrial disorders;~~ (Core)

neurotransmitters; (Core)

organic acids; (Core)

~~peroxisomal disorders and IEM;~~ (Core)

purines and pyrimidines; and, (Core)

transport. (Core)

~~acute management of IEM;~~ (Core)

~~enzyme replacement therapy;~~ (Core)

~~long term nutritional management; and,~~ (Core)

~~molecular diagnosis.~~ (Core)

1. Describe the Review Committee's rationale for this revision: **The Review Committee**

revised the topics in this section to better align with the topics on the certifying examination.

2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? **Revising the section to align with the certifying examination will give fellows better exposure to topics they will need for the exam, and ensures they are exposed to the topics most relevant in biochemical genetics today.**
3. How will the proposed requirement or revision impact continuity of patient care? **The proposed revision will not impact continuity of patient care, although it will give fellows a better knowledge base to treat patients in these areas.**
4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? **Some programs may have to add structured education in some of the added areas, which could require additional resources. However, as the structure of education is already in place, the impact in such cases should be minimal.**
5. How will the proposed revision impact other accredited programs? **The proposed requirement will not impact other accredited programs.**

Requirement #: VI.E.2.a)

Requirement Revision (significant change only):

Genetic counselors, laboratory directors, metabolic dietitians, nurses, technologists, and other providers and allied health professionals must be part of the interprofessional team. ^(Core)

1. Describe the Review Committee's rationale for this revision: **The Review Committee wanted to clearly define which individuals should be part of the interprofessional team.**
2. How will the proposed requirement or revision improve resident/fellow education, patient safety, and/or patient care quality? **Ensuring that fellows have an opportunity to work in interprofessional teams allows for more sharing of information about patients and patient care, leading to better and more thorough care. Additionally, working with these professionals during their educational program will prepare fellows for working in similar interprofessional teams in their independent careers.**
3. How will the proposed requirement or revision impact continuity of patient care? **Having fellows work in an effective interprofessional team will ensure better and more consistent transfer of information, and in turn lead to better continuity of care.**
4. Will the proposed requirement or revision necessitate additional institutional resources (e.g., facilities, organization of other services, addition of faculty members, financial support; volume and variety of patients), if so, how? **If these individuals are not already present at an institution, additional resources may be needed to hire them.**
5. How will the proposed revision impact other accredited programs? **Some of these individuals may also be affiliated with other programs. If that is the case, programs will need to determine how best to share or split educational duties.**