Purpose: The purpose of the logbook is to document that the applicant has had direct and meaningful involvement in the examination, diagnosis, communication of information, and management of biochemical genetics patients, and has received ongoing and appropriate clinical supervision. The logbook cases must provide evidence of at least one year of clinical experience and evidence of well-rounded experience with a wide variety of biochemical genetic conditions. Disorders submitted in the logbook should represent the broad spectrum of prenatal, pediatric, and adult biochemical genetics.

Submission Requirements: Logbooks must be completed in accordance with the written instructions provided in this document. Before submitting a logbook to the program director for review, the applicant must use the online data check program and correct any errors the program identifies. The training director and program director will then review the logbook and electronically submit their approval to the ABMGG Administrative Office by the stated deadline. Failure to follow these procedures will result in the logbook being returned to the applicant for revision, which may delay review of the applicant’s credentials and the determination of active candidate status. In addition, late fees may be incurred.

Case Selection:

1. All cases must have been seen in settings under an ACGME training program in medical biochemical genetics.

2. Supervision for case encounters must be provided by faculty who are ABMGG-certified, ABGC-certified, or CCMG-certified. For cases obtained during rotations in outside services, e.g., a neurology clinic, it is recommended that supervisors be certified by their appropriate certifying board(s). All supervisors must be identified in the training program’s accreditation documents as members of the training faculty.

3. All 150 cases must be obtained during the inclusive dates of the applicant’s medical biochemical genetics training. No more than 5 cases can be obtained in any one day.

4. Logbook entries must reflect at least one (1) year of medical biochemical genetics experience. No more than 35 cases may be obtained in any 30-day period.

5. Up to 50 cases may be garnered from the second year of Clinical Genetics residency, but such cases cannot be double-listed in both the Clinical Genetics and Medical Biochemical Genetics logbooks.

6. Each logbook entry must document the applicant’s role(s) in patient care, including examination, diagnosis and interpretation, communication of the test results, and management.
7. A given patient or family may appear at most three times in a logbook, once each for initial diagnosis, management in inpatient or emergency room setting, and outpatient visit.

8. For applicants seeking certification in more than one specialty (and therefore submitting more than one logbook), a given patient may only appear in a single logbook, regardless of the number of specimens processed or methodology used.

Description of Logbook Headings/Columns:

- **Entry number:** Access to the logbook at the start of the training program allows applicants to enter up to 300 cases while in training. The applicant must select 150 cases to submit for logbook review. You must be able to identify each case by its entry number if questions arise about a logbook entry. Patient names and bona fide hospital or clinic numbers may not be used anywhere in the logbook. Logbooks that contain specific information regarding the identity of a patient will not be reviewed.

- **Date:** The date in month/day/year [MM/DD/YYYY] format identifies when the patient was seen.

- **Primary Medical Biochemical Genetics Category:** For each case, use the numbers 1 through 5 as outlined below to identify the single category that best describes the indication for seeing the patient. Observe limits per category where specified.

  Category 1 **Diagnostic evaluation, new patient (outpatient):** Evaluation of infants, children, or adults initiated because of clinical signs, symptoms, positive family history or abnormal laboratory results (including newborn screening) suggesting a biochemical genetic condition. These may include prenatal cases not to exceed 5. At least 25 cases must be obtained in this category. Of these, no fewer than 5 and no more than 15 may involve newborn screening.

  Category 2 **Diagnostic evaluation, new patient (inpatient):** Evaluation of infants, children, or adults initiated because of clinical signs, symptoms, or abnormal laboratory results (including newborn screening) in the inpatient setting. At least 20 cases must be obtained in this category.

  Category 3 **Management/continuing care, routine (outpatient):** Medical management, consultation, or evaluation of patients previously diagnosed with a biochemical genetic condition. At least 75 cases must be obtained in this category.

  Category 4 **Management/continuing care, emergent (inpatient or emergency room):** Medical management, consultation, or evaluation of inpatients previously diagnosed with a biochemical genetic condition. At least 10 cases must be obtained in this category.

- **Diagnoses:** The logbook cases must demonstrate experience with a variety of medical biochemical genetics cases. It is recommended that a maximum of 20 cases be any one diagnosis but more strictly it is required that no more than 35 cases be any one diagnosis, such as phenylketonuria or galactosemia. Variations of specific diagnoses (e.g.,
phenylketonuria and persistent hyperphenylalaninemia) may not be counted as separate diagnoses, and replacement cases may be requested when the aggregate exceeds the case limit. A maximum of 35 cases may represent patients evaluated for a metabolic disorder who were determined to be normal.

Follow the instructions below when entering diagnoses in the online logbook:

1. Enter the diagnosis using the OMIM name or an OMIM alternative title. All cases representing the same condition should be entered using the same diagnosis name. For example: Enter all PKU cases as “PKU,” not “PKU” for some and “phenylketonuria” for others.

2. For cases where no disorder is identified, list the primary reason for metabolic evaluation (e.g., cardiomyopathy, liver disease).

3. For evaluations initiated because of family history or at-risk pregnancy, list the diagnosis first followed by the justification for classification in this category (e.g., OTC deficiency, positive family history).

4. If more than one patient or family with the same biochemical genetic category, diagnosis, visit date, trainee role(s), and supervisor are recorded, clearly indicate that entries are not duplicated records or members of the same family, as follows: “Phenylketonuria, patient or family 1; Phenylketonuria, patient or family 2”.

- **Trainee’s Roles:** Check all of the boxes that indicate the nature of your involvement in the case. A breadth of experience must be reflected in the logbook. A minimum of three roles must be specified for at least 120 cases.

1. **Patient encounter:** Collection and review of records, medical history, family history and physical examination. At least 45 cases must involve this role.

2. **Evaluation plan/Diagnosis/Interpretation of results (new patients):** Pertinent background reading, evaluation of the clinical significance of findings, generating a differential diagnosis, recommending further testing, and summarizing the case. At least 20 cases must involve this role.

3. **Ongoing management (follow-up patients):** Follow the disease progression with appropriate tests and medical management; provide appropriate counseling, psychosocial support, and anticipatory guidance to the family. At least 85 cases must involve this role.

4. **Communication of results to other professionals:** Provide an oral and/or written discussion of results to health care providers who requested the testing or their designated contact. At least 50 cases must involve this role.

5. **Oral communication of results to patients:** Provide an oral and/or written discussion of results and their significance to patients and families, including, as appropriate, results and implications of clinical examination, laboratory tests, procedures differential diagnosis and management options. At least 50 cases must involve this role.
6. **Laboratory testing:** Direct involvement in the clinical biochemical genetics laboratory, including interpretation of primary laboratory data, generating a differential diagnosis, and making a plan for evaluation of the patient. Data may be obtained from a laboratory not onsite of training program. At least 15 cases must involve this role.

- **Supervisor:** Include the full name, degree(s), and type of certification of the supervisor who was present and was directly responsible for your activities regarding that case.