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**PROPOSED  
PROGRAM REQUIREMENTS  
for GRADUATE MEDICAL EDUCATION in  
MEDICAL BIOCHEMICAL GENETICS**

**Common Program Requirements Appear in Bold.**

Sections of Text That Are Not Bolded Are Specialty Specific Requirements.

8 I. Introduction

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10 A. Description of the Specialty

- 11  
12 1. Medical biochemical geneticists are physicians who provide  
13 comprehensive diagnostic, management, and genetic  
14 counseling services for patients with inborn errors of  
15 metabolism. They focus on the treatment of genetic  
16 disorders of intermediary metabolism, lysosomal storage  
17 diseases, disorders of energy metabolism, and related  
18 disorders.  
19
- 20 2. Medical biochemical geneticists are able to (a) diagnose and  
21 provide acute management of inborn errors of metabolism;  
22 (b) provide long term management, including nutritional  
23 recommendations for chronic management of inborn errors  
24 of metabolism; (d) provide genetic counseling, including  
25 assessment of mode of inheritance, recurrence risk, and  
26 information about natural history of disease; (e) use their  
27 knowledge of heterogeneity, variability and natural history of  
28 inborn errors of metabolism in patient-care decision making;  
29 (d) elicit and interpret individual and family medical histories;  
30 (e) order and interpret specialized laboratory testing (g)  
31 interact with other health-care professionals, especially  
32 nutritionists, in the provision of services for patients with  
33 genetic disorders of intermediary metabolism.  
34

35 B. Scope of Education

- 36  
37 1. Accredited graduate medical education programs in medical  
38 biochemical genetics must provide the formal instruction and  
39 appropriate clinical experience necessary for trainees to  
40 develop the knowledge, skills, and attitudes essential to  
41 good clinical practice in the acute and chronic care of inborn  
42 errors of metabolism.  
43
- 44 2. Programs must provide (a) structured education, including  
45 formal coursework in the basic sciences and clinical areas  
46 pertinent to biochemical genetics, including advanced

47 approaches to the diagnosis and treatment of inborn errors  
48 of metabolism, long term nutritional management, molecular  
49 diagnosis, theory and practice of enzyme replacement  
50 therapy, and newborn screening; (b) mentored clinical  
51 training in the practice of biochemical genetics in both  
52 outpatient and inpatient settings; (c) advanced instruction in  
53 the interpretation of biochemical laboratory test results; (d)  
54 basic instruction in medical biochemical genetic laboratory  
55 testing; (e) basic instruction in clinical research.

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57 C. Program Length

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59 1. Medical biochemical genetics residencies are accredited to  
60 provide 1 year of graduate medical education. Physicians  
61 who have completed an Accreditation Council for Graduate  
62 Medical Education (ACGME)-accredited residency in  
63 Medical Genetics are eligible for appointment to a 1-year  
64 biochemical genetics fellowship.

65

66 2. In the 1-year program, the 12 months of biochemical  
67 genetics education must include 11 months of broad-based,  
68 clinically-oriented biochemical genetics activities and 1  
69 month of activities in a medical biochemical genetics  
70 diagnostic laboratory.

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72 II. Institutional Support

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74 A. Sponsoring institution

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76 1. **One sponsoring institution must assume the ultimate**  
77 **responsibility for the program as described in the**  
78 **Institutional Requirements, and this responsibility**  
79 **extends to trainee assignments at all participating**  
80 **institution.**

81

82 2. Institutions sponsoring medical biochemical genetics  
83 programs should also sponsor ACGME-accredited programs  
84 in clinical medical genetics, pediatrics and internal medicine.

85

86 B. Participating institutions

87

88 1. **Assignments to participating institutions must be based**  
89 **on a clear educational rationale, must have clearly**  
90 **stated learning objectives and activities, and should**  
91 **provide resources not otherwise available to the**  
92 **program.**

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2. **Assignments at participating institutions must be of sufficient length to ensure a quality educational experience and should provide sufficient opportunity for continuity of care. Although the number of participating institutions may vary with the various specialties' needs, all participating institutions must demonstrate the ability to promote the program goals and educational and peer activities. Exceptions must be justified and prior approved.**
  
  3. **Program letters of agreement must be developed for each participating institution that provides an educational experience for a trainee that is one month in duration or longer. In instances where two or more participating institutions in the program function as a single unit under the authority of the program director, letters are not necessary. The agreements should a. identify the faculty who will assume the educational and supervisory responsibility for trainees and specify the faculty responsibilities for teaching, supervision, and formal evaluation of trainee performance per Sections IV.D. and VI.A of the Program Requirements; b. outline the educational goals and objectives to be attained by the trainee during the assignment; c. specify the period of trainee assignment; d. establish the policies that will govern trainee education during the assignment.**

120 **C. Facilities and Resources**

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1. Program institutions should have a medical biochemical genetics laboratory which provides an appropriate volume and variety of biochemical genetics-related services and has an adequate number of qualified staff including a laboratory director who has American Board of Medical Genetics (ABMG) certification in Biochemical Genetics.
  
  2. Program institutions must provide a sufficient number and variety of inpatients and outpatients to permit trainees to gain experience with the presentation, natural history, and chronic treatment of a wide range of inborn errors of metabolism.
  
  3. Adequate space and equipment must be available to meet the educational goals of the program. In addition to space for patient care activities, this requires meeting rooms,

- 138 classrooms, office space, research facilities, and facilities for  
139 record storage and retrieval.
- 140
- 141 4. Office and laboratory space must be provided for the  
142 trainees for both patient-care work and participation in  
143 scholarly activities.
- 144
- 145 5. Trainees must have ready access to a major medical library,  
146 either at the institution where the trainees are located or  
147 through arrangement with convenient nearby institutions.  
148 The institutional library should contain standard journals and  
149 texts in biochemical genetics, clinical genetics, and related  
150 fields of medicine and provide services for the electronic  
151 retrieval of information from national medical databases to  
152 permit timely literature review.
- 153
- 154 6. Trainees must have access to an on-site library or to a  
155 collection of appropriate texts and journals in each institution  
156 participating in a residency program. On-site libraries and/or  
157 collections of texts and journals must be readily available  
158 during nights and weekends.
- 159

### 160 **III. Trainee Appointment**

#### 161 **A. Eligibility Criteria**

162 **The program director must comply with the criteria for trainee**  
163 **eligibility as specified in the Institutional Requirements.**

#### 164 **B. Number of Trainees**

165 **The RRC will approve the number of trainees based upon**  
166 **established written criteria that include the adequacy of**  
167 **resources for trainee education such as quality and volume of**  
168 **patients and related clinical material available for education,**  
169 **faculty-trainee ratio, institutional funding, and the quality of**  
170 **faculty teaching.**

#### 171 **C. Trainee Transfer**

172 **To determine the appropriate level of education for a trainee**  
173 **who is transferring from another residency program, the**  
174 **program director must receive written verification of the**  
175 **previous educational experiences and a statement regarding**  
176 **the performance evaluation of the transferring trainee,**  
177 **including an assessment of competence in the six areas**  
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described in section V. B., prior to acceptance into the program. A program director is required to provide verification of residency education for any trainees who may leave the program prior to completion of their education.

**D. Appointment of Fellows and Other Students**

1. **The appointment of fellows and other specialty trainees or students must not dilute or detract from the educational opportunities of the regularly appointed specialty trainees.**

**E. Recruitment**

Programs must develop an active plan for recruitment of trainees. Innovative strategies for recruitment and retention of trainees should be implemented.

**IV. Faculty**

**The program director and faculty are responsible for the general administration of the program and for the establishment and maintenance of a stable educational environment. Adequate lengths of appointment for the program director and faculty are essential to maintaining such an environment. The length of appointment for the program director should provide for continuity of leadership.**

Institutions must develop and implement policies and procedures to ensure continuity when the program director departs, is on sabbatical, or is unable to meet his or her duties for any other reason.

**A. Qualifications of the Program Director**

1. **There must be a single program director responsible for the program. The person designated with this authority is accountable for the operation of the program and should be a member of the staff of the sponsoring or integrated institution.**
2. **The program director must**
  - a. **possess requisite specialty expertise as well as documented educational and administrative abilities and experience in his or her field.**
  - b. **be a *physician who is* certified in Clinical Biochemical Genetics by the American Board of**

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Medical Genetics (ABMG) or possess qualifications judged to be acceptable by the RRC.

- c. be appointed in good standing and based at the primary teaching site.

**B. Responsibilities of the Program Director**

1. **Overseeing and organizing the activities of the educational program in all institutions that participate in the program. This includes selecting and supervising the faculty and other program personnel at each participating institution, appointing a local site director, and monitoring appropriate trainee supervision at all participating institutions.**
2. **Preparing an accurate statistical and narrative description of the program as requested by the RRC as well as updating annually the program and trainee records through the ACGME Accreditation Data System (ADS).**
3. **Promptly notifying the executive director of the RRC using the ADS of a change in program director or department chair.**
4. **Ensuring the implementation of fair policies and procedures, as established by the sponsoring institution, to address trainee grievances and due process in compliance with the Institutional Requirements.**
5. **Monitoring trainee stress, including mental or emotional conditions inhibiting performance or learning, and drug- or alcohol-related dysfunction. Both the program director and faculty should be sensitive to the need for timely provision of confidential counseling and psychological support services to trainees. Situations that demand excessive service or that consistently produce undesirable stress on trainees must be evaluated and modified.**
6. **Obtaining prior approval of the RRC for changes in the program that may significantly alter the educational experience of the trainees, for example: a. The addition or deletion of major participating institution(s) as**

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specified in section II.B. of this document. b. Change in the approved trainee complement for those specialties that approve trainee complement. c. Change in the format of the educational program. On review of a proposal for a major change in a program, the RRC may determine that a site visit is necessary.

7. Maintaining continuing involvement in scholarly activities, participation in key national scientific human genetics meetings, and contribution to medical education both locally and nationally.

**C. Faculty Qualifications**

1. **The physician faculty must**
  - a. **possess requisite specialty expertise as well as documented educational and administrative abilities and experience in their field.**
  - b. **be certified by the ABMG or possess qualifications judged by the RRC to be acceptable.**
  - c. **be appointed in good standing to the staff of an institution participating in the program.**
2. **Nonphysician faculty must be appropriately qualified in their field and possess appropriate institutional appointments.**

**D. Faculty Responsibilities**

1. **Number and Type of Faculty**
  - a. **At each institution participating in the program, there must be a sufficient number of faculty with documented qualifications to instruct and supervise adequately the trainees in the program.**
  - b. There must be at least one member of the teaching staff (including the program director), who is certified in Biochemical Genetics by the ABMG (or possess equivalent qualifications) and is a members of the medical staffs at program institutions.

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c. The individual responsible for trainee education in laboratory biochemical genetics must be ABMG-certified in biochemical genetics.

2. **Faculty members must devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities. The faculty must evaluate in a timely manner the trainees whom they supervise.**
3. **The faculty must demonstrate a strong interest in the education of trainees, demonstrate competence in both clinical care and teaching abilities, support the goals and objectives of the educational program, and demonstrate commitment to their own continuing medical education by participating in scholarly activities as described in Section V.E.1, including regular and active participation in program rounds, conferences, and journal clubs.**

**E. Other Program Personnel**

**The program must be provided with the additional professional, technical, and clerical personnel needed to support the administration and educational conduct of the program.**

**V. The Educational Program**

**The program design and sequencing of educational experiences will be approved by the RRC as part of the accreditation process.** The fellowship must be organized to provide a well structured, integrated and progressive educational experience in medical biochemical genetics. The trainees must have the opportunity to develop the abilities to diagnose inborn errors of metabolism, counsel patients, and manage the broad range of clinical problems that are encompassed within biochemical genetics. As biochemical genetics increasingly involves diagnosis and/or long term management of adults, trainees must be competent to work with patients of all ages.

**A. Role of Program Director and Faculty**

**The program director, with assistance of the faculty, is responsible for developing and implementing the academic and clinical program of trainee education by**

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1. preparing and implementing a written statement outlining the educational goals of the program with respect to the knowledge, skills, and other attributes of trainees for each major assignment and each level of the program. The statement must be distributed to trainees and faculty and reviewed with trainees prior to the assignment.
2. preparing and implementing a comprehensive, well-organized, and effective curriculum, both academic and clinical, which includes the presentation of core specialty knowledge supplemented by the addition of current information.
3. providing trainees with direct experience in progressive responsibility for patient management.

**B. ACGME Competencies**

The residency program must require that its trainees obtain competence in the six areas listed below to the level expected of a new practitioner. Programs must define the specific knowledge, skills, behaviors, and attitudes required and provide educational experiences as needed in order for their trainees to demonstrate the following:

1. ***Patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.*** Trainees are expected to:
  - a. gather essential and accurate information about the patient using the following clinical skills:
    - i. medical interviewing, including the taking and interpretation of a complete family history, including construction of a pedigree
    - ii. physical examination
    - iii. diagnostic studies, including the interpretation of laboratory data generated from biochemical and molecular genetic analyses
  - b. make informed decisions about diagnostic and therapeutic interventions based on patient and family

- 411 information and preferences, up-to-date scientific  
412 evidence, and clinical judgment by
- 413
- 414 i. demonstrating effective and appropriate clinical  
415 problem-solving skills
- 416
- 417 ii. understanding the limits of one’s knowledge  
418 and expertise
- 419
- 420 iii. appropriate use of consultants and referrals
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- 422 c. develop and carry out patient management plans  
423 including prescription of medication, dietary  
424 supplements, and other dietary plans
- 425
- 426 d. counsel and educate patients and their families
- 427
- 428 e. work with health care professionals, including those  
429 from other disciplines and especially a medical  
430 nutritionist, to provide patient-focused care
- 431
- 432 **2. *Medical knowledge about established and evolving***  
433 ***biomedical, clinical, and cognate (eg, epidemiological***  
434 ***and social-behavioral) sciences and the application of***  
435 ***this knowledge to patient care.***
- 436
- 437 **3. *Practice-based learning and improvement that involves***  
438 ***investigation and evaluation of their own patient care,***  
439 ***appraisal and assimilation of scientific evidence, and***  
440 ***improvements in patient care.***
- 441
- 442 **4. *Interpersonal and communication skills that result in***  
443 ***effective information exchange and collaboration with***  
444 ***patients, their families, and other health professionals.***
- 445
- 446 **5. *Professionalism, as manifested through a commitment***  
447 ***to carrying out professional responsibilities, adherence***  
448 ***to ethical principles, and sensitivity to a diverse patient***  
449 ***population.***
- 450
- 451 **6. *Systems-based practice, as manifested by actions that***  
452 ***demonstrate an awareness of and responsiveness to the***  
453 ***larger context and system of health care and the ability***  
454 ***to effectively call on system resources to provide care***  
455 ***that is of optimal value.***
- 456

- 457 C. Didactic components  
458  
459 1. Basic Sciences  
460  
461 a. Each trainee must participate formally, through  
462 lectures or other didactic sessions, in the equivalent  
463 of a 1-semester graduate level course in biochemical  
464 genetics, including but not limited to population and  
465 newborn screening, disorders of amino acid  
466 metabolism, disorders of fatty acid oxidation,  
467 mitochondrial disorders, lysosomal storage diseases  
468 and lipidoses, acute management of inborn errors of  
469 metabolism, enzyme replacement therapy,  
470 galactosemia, glycogen storage diseases,  
471 peroxisomal disorders and other inborn errors of  
472 metabolism (An introductory medical genetics course  
473 for clinical genetics specialists does not satisfy this  
474 requirement.)  
475  
476 b. Research seminars should be a part of the training  
477 experience but shall not be considered an acceptable  
478 alternative to this basic science didactic component.  
479  
480 2. Clinical Conferences  
481  
482 Clinical teaching conferences must be organized by the  
483 faculty for the trainees, and attendance by the trainees and  
484 the faculty must be documented. These conferences must  
485 be distinct from the basic science lectures and didactic  
486 sessions. Clinical teaching conferences may include formal  
487 didactic sessions on clinical laboratory topics, medical  
488 genetics rounds, journal clubs, and follow-up conferences for  
489 metabolic clinics.  
490  
491 D. Clinical components  
492  
493 1. Patient Population  
494  
495 Trainees must have the opportunity to care for a number of  
496 patients sufficient to permit them to develop an  
497 understanding of the wide variety of inborn errors of  
498 metabolism. These patients must be seen in both outpatient  
499 and inpatient settings.  
500  
501 2. Correlation of Laboratory and Clinical Experiences  
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503 The medical biochemical genetics laboratory must be  
504 integral components of each program. Trainees must spend  
505 a minimum of 4 weeks in the laboratory so that they will be  
506 able to develop their abilities to understand an appropriate  
507 variety of laboratory methods. Trainees' education must  
508 include participation in the working conferences of  
509 laboratories as well as ongoing discussion of laboratory data  
510 during other clinical conferences.

511  
512 3. Other Health Care Professionals

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514 Trainees must have regular opportunities to work with  
515 nurses and nutritionists who are involved in the provision of  
516 clinical metabolic disease services.

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518 4. Responsibilities for Patient Care

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520 The development of mature clinical judgment requires that  
521 trainees, properly supervised, be given responsibility for  
522 patient care commensurate with their ability. This can be  
523 achieved only if the trainee is involved in the decision-  
524 making process and in the continuity of patient care.  
525 Trainees must be given the responsibility for direct patient  
526 care in all settings, including planning and management,  
527 both diagnostic and therapeutic, subject to review and  
528 approval by the attending physician.

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530 **E. Scholarly Activities**

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532 **1. The responsibility for establishing and maintaining an**  
533 **environment of inquiry and scholarship rests with the**  
534 **faculty, and an active research component must be**  
535 **included within each program. Both faculty and trainees**  
536 **must participate actively in scholarly activity.**

537 **Scholarship is defined as one of the following:**

- 538
- 539 **a. The scholarship of discovery, as evidenced by**  
540 **peer-reviewed funding or publication of original**  
541 **research in peer-reviewed journals.**
  - 542
  - 543 **b. The scholarship of dissemination, as evidenced**  
544 **by review articles or chapters in textbooks.**
  - 545
  - 546 **c. The scholarship of application, as evidenced by**  
547 **the publication or presentation at local, regional,**  
548 **or national professional and scientific society**

- 549 meetings, for example, case reports or clinical  
550 series.
- 551
- 552 d. Active participation of the faculty in clinical  
553 discussions, rounds, journal club, and research  
554 conferences in a manner that promotes a spirit of  
555 inquiry and scholarship; offering of guidance and  
556 technical support, e.g., research design,  
557 statistical analysis, for trainees involved in  
558 research; and provision of support for trainee  
559 participation as appropriate in scholarly activities.  
560
- 561 2. Adequate resources for scholarly activities for faculty  
562 and trainees must be available, eg, sufficient laboratory  
563 space, equipment, computer services for data analysis,  
564 and statistical consultation services.  
565
- 566 **F. Trainee Duty Hours and the Working Environment**  
567
- 568 Providing trainees with a sound academic and clinical  
569 education must be carefully planned and balanced with  
570 concerns for patient safety and trainee well-being. Each  
571 program must ensure that the learning objectives of the  
572 program are not compromised by excessive reliance on  
573 trainees to fulfill service obligations. Didactic and clinical  
574 education must have priority in the allotment of trainees' time  
575 and energies. Duty hour assignments must recognize that  
576 faculty and trainees collectively have responsibility for the  
577 safety and welfare of patients.  
578
- 579 1. Supervision of Trainees  
580
- 581 a. All patient care must be supervised by qualified  
582 faculty. The program director must ensure, direct,  
583 and document adequate supervision of trainees at  
584 all times. Trainees must be provided with rapid,  
585 reliable systems for communicating with  
586 supervising faculty.  
587
- 588 b. Faculty schedules must be structured to provide  
589 trainees with continuous supervision and  
590 consultation. Attending physicians or supervising  
591 trainees with appropriate experience for the  
592 severity and complexity of the patient's condition  
593 must be available to trainees at all times and must  
594 be able to respond in a timely fashion.

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- c. **Faculty and trainees must be educated to recognize the signs of fatigue and adopt and apply policies to prevent and counteract the potential negative effects.**

**2. Duty Hours**

- a. **Duty hours are defined as all clinical and academic activities related to the residency program, ie, patient care (both inpatient and outpatient), administrative duties related to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled academic activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.**
- b. **Duty hours must be limited to 80 hours per week, averaged over a fourweek period, inclusive of all in-house call activities.**
- c. **Trainees must be provided with 1 day in 7 free from all educational and clinical responsibilities, averaged over a 4-week period, inclusive of call. One day is defined as one continuous 24-hour period free from all clinical, educational, and administrative activities.**
- d. **A 10-hour time period for rest and personal activities must be provided between all daily duty periods, and after in-house call.**

**3. On-Call Activities** The objective of on-call activities is to provide trainees with continuity of patient care experiences throughout a 24-hour period. In-house call is defined as those duty hours beyond the normal work day when trainees are required to be immediately available in the assigned institution.

- a. **In-house call must occur no more frequently than every third night, averaged over a four-week period.**

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- b. Continuous on-site duty, including in-house call, must not exceed 24 consecutive hours. Trainees may remain on duty for up to 6 additional hours to participate in didactic activities, maintain continuity of medical and surgical care, transfer care of patients, or conduct outpatient continuity clinics.**
- c. No new patients may be accepted after 24 hours of continuous duty. A new patient is defined as any patient for whom the trainee has not previously provided care.**
- d. -home call (pager call) is defined as call taken from outside the assigned institution.**
  - i. The frequency of at-home call is not subject to the every third night limitation. However, at-home call must not be so frequent as to preclude rest and reasonable personal time for each trainee. Trainees taking at-home call must be provided with 1 day in 7 completely free from all educational and clinical responsibilities, averaged over a 4-week period.**
  - ii. When trainees are called into the hospital from home, the hours trainees spend in-house are counted toward the 80-hour limit.**
  - iii. The program director and the faculty must monitor the demands of at-home call in their programs and make scheduling adjustments as necessary to mitigate excessive service demands and/or fatigue.**

**4. Moonlighting**

- a. Because residency education is a full-time endeavor, the program director must ensure that moonlighting does not interfere with the ability of the trainee to achieve the goals and objectives of the educational program.**
- b. The program director must comply with the sponsoring institution's written policies and**

- 686 procedures regarding moonlighting, in  
687 compliance with the Institutional Requirements III.  
688 D.1.k.  
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- 690 c. Moonlighting that occurs within the residency  
691 program and/or the sponsoring institution or the  
692 non-hospital sponsor's primary clinical site(s), ie,  
693 internal moonlighting, must be counted toward  
694 the 80-hour weekly limit on duty hours.  
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- 696 5. Oversight  
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- 698 a. Each program must have written policies and  
699 procedures consistent with the Institutional and  
700 Program Requirements for trainee duty hours and  
701 the working environment. These policies must be  
702 distributed to the trainees and the faculty.  
703 Monitoring of duty hours is required with  
704 frequency sufficient to ensure an appropriate  
705 balance between education and service.  
706
- 707 b. Back-up support systems must be provided when  
708 patient care responsibilities are unusually difficult  
709 or prolonged, or if unexpected circumstances  
710 create trainee fatigue sufficient to jeopardize  
711 patient care.  
712
- 713 6. Duty Hours Exception  
714
- 715 An RRC may grant exceptions for up to 10 % of the 80-  
716 hour limit, to individual programs based on a sound  
717 educational rationale. However, prior permission of the  
718 institution's GMEC is required.  
719
- 720 VI. Evaluation  
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- 722 A. Trainee Evaluation  
723
- 724 1. The residency program must demonstrate that it has an  
725 effective plan for assessing trainee performance  
726 throughout the program and for utilizing the results to  
727 improve trainee performance. This plan should include  
728
- 729 a. the use of methods that produce an accurate  
730 assessment of trainees' competence in patient  
731 care, medical knowledge, practice-based learning

- 732 and improvement, interpersonal and  
733 communication skills, professionalism, and  
734 systems-based practice.  
735
- 736 b. mechanisms for providing regular and timely  
737 performance feedback to trainees that includes at  
738 least
- 739
- 740 i. written semiannual evaluation that is  
741 communicated to each trainee in a timely  
742 manner and  
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- 744 ii. the maintenance of a record of evaluation  
745 for each trainee that is accessible to the  
746 trainee.  
747
- 748 c. a process involving use of assessment results to  
749 achieve progressive improvements in trainees'  
750 competence and performance. Appropriate  
751 sources of evaluation include faculty, patients,  
752 peers, self, and other professional staff.  
753
- 754 2. The program director must provide a final evaluation for  
755 each trainee who completes the program. The  
756 evaluation must include a review of the trainee's  
757 performance during the final period of education and  
758 should verify that the trainee has demonstrated  
759 sufficient professional ability to practice competently  
760 and independently. The final evaluation must be part of  
761 the trainee's permanent record maintained by the  
762 institution.  
763
- 764 **B. Faculty Evaluation**  
765
- 766 The performance of the faculty must be evaluated by the  
767 program no less frequently than at the midpoint of the  
768 accreditation cycle and again prior to the next site visit. The  
769 evaluations should include a review of their teaching abilities,  
770 commitment to the educational program, clinical knowledge,  
771 and scholarly activities. Annual written confidential  
772 evaluations by trainees must be included in this process.  
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- 774 **C. Program Evaluation**  
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- 776 The educational effectiveness of a program must be evaluated  
777 at least annually in a systematic manner.

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1. **Representative program personnel, ie, at least the program director, representative faculty, and at least one trainee, must be organized to review program goals and objectives and the effectiveness of the program in achieving them. The group must have regular documented meetings at least annually for this purpose. In the evaluation process, the group must take into consideration written comments from the faculty, the most recent report of the GMEC of the sponsoring institution (see Institutional Requirements I.B.3.d), and the trainees' confidential written evaluations. If deficiencies are found, the group should prepare an explicit plan of action, which should be approved by the faculty and documented in the minutes.**
2. **Outcome assessment**
  - a. **The program should use trainee performance and outcome assessment in its evaluation of the educational effectiveness of the residency program.**
  - b. **The program should have in place a process for using trainee and performance assessment results together with other program evaluation results to improve the residency program.**
3. **Performance of program graduates on the certification examination should be used as one measure of evaluating program effectiveness.**

**VII. Experimentation and Innovation**

- A. **Since responsible innovation and experimentation are essential to improving professional education, experimental projects supported by sound educational principles are encouraged.**
- B. **Requests for experimentation or innovative projects that may deviate from the program requirements must be RRC prior-approved and must include the educational rationale and a method for evaluating the project.**

822           **C.     The sponsoring institution and program are jointly responsible**  
823           **for the quality of education offered to trainees for the duration**  
824           **of such a project.**

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826   VIII.   Board Certification

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828           Trainees who plan to seek certification by the American Board of Medical  
829           Genetics should communicate with the Executive Vice  
830           President/Secretary of the Board to ascertain the current requirements for  
831           acceptance as a candidate for certification.