**New Application: Molecular Genetic Pathology**

**Review Committees for Medical Genetics and Genomics and Pathology**

**ACGME**

**Oversight**

**Sponsoring Institution**

1. Will the Sponsoring Institution also sponsor ACGME-accredited residencies in the following disciplines? [PRs 1.2.a.-1.2.b.]
2. Anatomic and clinical pathology  YES  NO
3. Medical genetics and genomics  YES  NO
4. Briefly describe the opportunities molecular genetic pathology fellows will have to interact with fellows and faculty members from other ACGME-accredited programs. [PR 1.2.a.]

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| Click or tap here to enter text. |

**Participating Sites**

1. Is the program jointly supported by the academic units responsible for pathology and clinical medical genetics? [PR 1.2.d.]  YES  NO
2. Briefly describe how the program will ensure that activity is supported by other disciplines, including infectious disease, internal medicine, obstetrics and gynecology, oncology, pediatrics, and surgery. [PR 1.8.d.]

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**Resources**

1. Autopsy Pathology: Provide the following data for each site to which fellows are assigned for autopsy education. [PR 1.8.]

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| --- | --- | --- |
| 12-month period covered by statistics: | From: Click or tap to enter a date. | To: Click or tap to enter a date. |

|  | **Site #1** | **Site #2** | **Site #3** | **Site #4** |
| --- | --- | --- | --- | --- |
| Total deaths (exclude stillbirths and medicolegal) | # | # | # | # |
| Stillbirths | # | # | # | # |
| Inpatient autopsies (exclude stillbirths and medicolegal) | # | # | # | # |
| Perinatal and stillbirth autopsies | # | # | # | # |
| Medicolegal autopsies | # | # | # | # |
| **TOTAL** | # | # | # | # |

1. Surgical Pathology: Provide the following data for each site to which fellows are assigned for surgical pathology education. [PR 1.8.]

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| 12-month period covered by statistics: | From: Click or tap to enter a date. | To: Click or tap to enter a date. |

|  | **Site #1** | **Site #2** | **Site #3** | **Site #4** |
| --- | --- | --- | --- | --- |
| Products of conception/placentas | # | # | # | # |
| Bone marrow specimens | # | # | # | # |
| Lymph node specimens | # | # | # | # |
| Gross examination only | # | # | # | # |
| Other | # | # | # | # |
| **TOTAL** | # | # | # | # |

1. Medical Genetics Patient Data: Provide the data requested below for each site/clinic where fellows actively participate in patient care. Copy this section as necessary. [PR 1.8.]

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| --- | --- | --- |
| 12-month period covered by statistics: | From: Click or tap to enter a date. | To: Click or tap to enter a date. |

|  | **Site #1** | **Site #2** | **Site #3** | **Site #4** |
| --- | --- | --- | --- | --- |
| Enter the number of patients/families seen during the last 12-month period: | # | # | # | # |
| If the clinic sees a mix of pediatric, adult and prenatal patients, enter the percentage of the total clinic population that each group comprises: | | | | |
| Pediatric | #% | #% | #% | #% |
| Adult | #% | #% | #% | #% |
| Prenatal | #% | #% | #% | #% |

1. Provide a concise description of key educational facilities and services, including comments on the following:
2. The facilities and resources (including space, equipment, support personnel, and funding) that will be utilized for fellow education in the basic sciences [PR 1.8.a.]

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1. The clinical and laboratory research facilities and resources (including space, equipment, support personnel, and funding) available to support fellow research [PR 1.8.a.]

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1. The facilities for patient care activities, meeting rooms, offices, and classrooms [PR 1.8.a.]

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| Click or tap here to enter text. |

1. Pathology space, equipment, and laboratories [PR 1.8.a.]

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| Click or tap here to enter text. |

Provide a narrative description of program research activity, including comments on each of the following:

1. What is the current accreditation status and/or licensure date (list accrediting body) for each laboratory associated with the program? [PR 1.8.c.]

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| Click or tap here to enter text. |

Molecular Genetic Pathology Methods: Provide data for each molecular genetics laboratory that contributes significantly to fellow education. Ensure each lab director’s name and CV are included on the Faculty Roster in the Accreditation Data System (ADS). Copy and add tables as needed. [PR 1.8.b.]

Enter the data requested for the clinical molecular tests performed in the laboratory during the last year.

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| --- | --- | --- |
| 12-month period covered by statistics: | From: Click or tap to enter a date. | To: Click or tap to enter a date. |

|  |  |
| --- | --- |
| Laboratory Name: | Click or tap here to enter text. |
| Address: | Click or tap here to enter text. |
| Name of Laboratory Director: | Click or tap here to enter text. |

| **Name of Disease or Agent** | **Diagnostic Method(s)** | **Number of Cases\*** | **Number of Tests Performed** |
| --- | --- | --- | --- |
| Disease or Agent | Diagnostic Method(s) | # | # |
| Disease or Agent | Diagnostic Method(s) | # | # |
| Disease or Agent | Diagnostic Method(s) | # | # |
| Disease or Agent | Diagnostic Method(s) | # | # |
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| Disease or Agent | Diagnostic Method(s) | # | # |
| Disease or Agent | Diagnostic Method(s) | # | # |

\*A case is defined as the complete laboratory evaluation of an individual or an individual tissue (e.g., for tumor specimens). If a family study is involved, the entire family is considered a single case.

**Other Learners and Health Care Personnel**

1. What other types of learners (e.g., genetic counseling students, medical students, residents from other programs, graduate students) are involved in molecular genetic pathology education at program sites? What type of impact do these learners have on the educational resources available for genetics? What is the planned nature and extent of these learners’ interactions with the program fellows? [PR 1.11.]

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**Educational Program**

**ACGME Competencies**

**Patient Care and Procedural Skills**

* 1. Indicate the settings and activities in which fellows will demonstrate competence in the evaluation and management of the following areas of patient care. Also indicate the method(s) that will be used to assess competence.

| **Competency Area** | **Settings/Activities** | **Assessment Method(s)** |
| --- | --- | --- |
| Acting as a consultant in clinical decision making in collaboration with professionals from related disciplines, and in the cost-effective use of molecular genetic and genomic testing  [PR 4.4.a.] | Click or tap here to enter text. | Click or tap here to enter text. |
| For fellows who are pathologists: developing an approach for genetic and genomic testing to categorize conditions in a manner that facilitates clinical management  [PR 4.4.b.] | Click or tap here to enter text. | Click or tap here to enter text. |

**Medical Knowledge**

* + 1. Indicate the activities (lectures, conferences, journal clubs, clinical teaching rounds, etc.) in which fellows will demonstrate their knowledge in each of the following areas. Also indicate the method(s) that will be used to assess competence.

| **Competency Area** | **Settings/Activities** | **Assessment Method(s)** |
| --- | --- | --- |
| Molecular biology and biochemistry of nucleic acids and proteins, including structure, function, replication mechanisms, in vitro synthesis, and the roles of DNA and various RNA classes and proteins in cellular biology  [PRs 4.6.a.-4.6.a.5.] | Click or tap here to enter text. | Click or tap here to enter text. |
| The mechanism of regulation of gene expression in prokaryotes and eukaryotes, and the biochemical mechanisms of pathogenic variants  [PRs 4.6.b.-4.6.c.] | Click or tap here to enter text. | Click or tap here to enter text. |
| Disease processes at the molecular level and the methods used for their detection, including solid tumors, leukemia-lymphomas, infectious diseases, inherited Mendelian diseases, non-Mendelian and acquired genetic diseases (e.g., mitochondrial disorders, triplet repeats, expansion disorders, cytogenetic aberrations, and imprinting disorders)  [PRs 4.6.d.-4.6.d.1.] | Click or tap here to enter text. | Click or tap here to enter text. |
| HLA typing/identity testing and the principles of linkage analysis  [PR 4.6.e.] | Click or tap here to enter text. | Click or tap here to enter text. |
| Statistics as applied to diagnosis and management, test performance and applications, limitations of genetic and genomic test methodologies, and calculation of primary and residual risk  [PR 4.6.f.] | Click or tap here to enter text. | Click or tap here to enter text. |
| The principles of molecular diagnostic, prognostic, and therapeutic testing for patients with infectious diseases and cancer, and tests to monitor affected patients  [PR 4.6.g.] | Click or tap here to enter text. | Click or tap here to enter text. |
| For fellows who are medical geneticists: autopsy and surgical pathology procedures, infectious diseases, hematopathology, and other relevant pathology activities  [PR 4.6.h.] | Click or tap here to enter text. | Click or tap here to enter text. |
| How to select and appropriately sample fresh and fixed tissue for molecular testing  [PR 4.6.h.1.] | Click or tap here to enter text. | Click or tap here to enter text. |
| Laboratory regulatory and accreditation requirements  [PR 4.6.i.] | Click or tap here to enter text. | Click or tap here to enter text. |
| Requirements for establishing and operating a molecular genetic pathology laboratory, laboratory management, and supervising and training laboratory personnel in advanced techniques  [PR 4.6.j.] | Click or tap here to enter text. | Click or tap here to enter text. |
| Incorporate clinical and other laboratory information into the interpretation and the reporting of genetic and genomic results.  [PR 4.6.k.] | Click or tap here to enter text. | Click or tap here to enter text. |

1. Describe the learning activities through which fellows demonstrate competence as consultants in clinical decision-making in collaboration with professionals from related disciplines and in the cost-effective use of molecular genetic and genomic testing [PR 4.4.a.]

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**Practice-based Learning and Improvement**

1. Briefly describe one planned quality improvement activity or project that will allow fellows to demonstrate an ability to evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care. [PR 4.7.] (Limit response to 400 words)

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**Interpersonal and Communication Skills**

1. Briefly describe one learning activity in which fellows develop interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. [PR 4.8.] (Limit your response to 400 words)

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**Systems-based Practice**

1. Describe the learning activity(ies) through which fellows develop an awareness of and responsiveness to the larger context and system of health care, including the structural and social determinants of health, as well as the ability to call effectively on other resources in the system to provide optimal health care. [PR 4.9.] (Limit your response to 400 words)

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**Curriculum Organization and Fellow Experiences**

Provide a narrative description of fellow education, including comments on the following:

1. Briefly describe how the program will provide a structured educational experience in all current aspects of the discipline, including basic science, diagnostic laboratory procedures, laboratory management, and consultation. [PR 4.11.b.]

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1. How will the program ensure that fellows are involved in molecular genetic pathology throughout the year? Will this include both didactic instruction and practical experience? [PR 4.11.d.]

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1. How will the program ensure that fellows’ experiences are designed to allow appropriate faculty member supervision such that fellows progress to the performance of assigned clinical responsibilities under oversight, as defined in in section 6, in order to demonstrate their ability to enter the autonomous practice of molecular genetic pathology prior to completion of the program? [PRs 4.11.a.]

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1. Briefly describe the types and frequency of molecular genetic pathology related inter- and intra-departmental clinical conferences, seminars, journal clubs, rounds, and other didactic sessions. Comment on the levels of teaching staff participation and fellow attendance at these sessions. Provide a list of topics and speakers as appropriate. Specifically include molecular genetic pathology outreach activities to departments other than medical genetics and pathology.   
   [PRs 4.11.e.]

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1. Briefly describe the lectures and other didactic sessions that molecular genetic pathology fellows will be required to attend. When relevant, a syllabus/conference schedule may be attached. [PR 4.11.e.1.]

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1. Will instruction include the use of study sets and files of both usual and unusual cases, as well as other educational materials? [PR 4.11.f.] YES  NO

If “NO,” explain.

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1. Describe the opportunities for fellows to regularly participate in interdisciplinary work with genetic counselors, including counselors involved in familial cancer genetic counseling, nurses, clinical lab staff, pathologists, clinical care providers, and other health care professionals who are involved in the provision of clinical medical genetics services. [PRs 4.11.g.-4.11.h.]

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1. Briefly describe how fellows will participate in laboratory quality assurance activities and inspections. [PR 4.11.i.]

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**the Learning and Working Environment**

**Clinical Experience and Education**

* + 1. Briefly describe the program policies and practices regarding fellow scheduling, including commenting on regular working hours, on-call assignments, and time away from program responsibilities. [PR 6.20.]

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| Click or tap here to enter text. |