Specialist in Molecular Biology, SMB(ASCP)

To be eligible for this examination category, an applicant must satisfy the requirements of at least one of the following routes:

**ROUTE 1:** MB(ASCP) certification, AND a baccalaureate degree from a regionally accredited college/university, AND three years full time acceptable experience (clinical, veterinary, industry or research) in a molecular biology laboratory* in the U.S., Canada or an accredited laboratory** within the last six years. These three years of experience must be acquired post baccalaureate degree.

**ROUTE 2:** Master’s degree in molecular biology, chemistry, biology, immunology, microbiology, allied health, clinical laboratory sciences, or an appropriately related field, from a regionally accredited college/university, AND three years full time acceptable experience (clinical, veterinary, industry or research) in a molecular biology laboratory* in the U.S., Canada or an accredited laboratory** within the last six years. These three years of experience must be acquired post baccalaureate degree.

**ROUTE 3:** Doctorate in molecular biology, chemistry, biology, immunology, microbiology, allied health, clinical laboratory sciences, or an appropriately related field, from a regionally accredited college/university, AND two years of post-doctoral fellowship*** in a molecular biology laboratory* in the U.S. or Canada or two years full time acceptable experience in a molecular biology laboratory* in the U.S., Canada or an accredited laboratory** within the last five years. These two years of experience must be acquired post baccalaureate degree.

**ROUTE 4:** MB(ASCP) certification, AND a baccalaureate degree or master’s degree from a regionally accredited college/university, AND three years of full time acceptable experience as an academic educator in clinical molecular biology at a regionally accredited college/university in the U.S., Canada or an accredited laboratory** within the last six years. These three years of experience must be acquired post baccalaureate degree.

**ROUTE 5:** MB(ASCP) certification, AND a doctorate in molecular biology, chemistry, biology, immunology, microbiology, allied health, clinical laboratory sciences, or an appropriately related field, from a regionally accredited college/university, AND one year of full time acceptable experience as an academic educator in clinical molecular biology at a regionally accredited college/university in the U.S. or Canada or an accredited laboratory** within the last five years.

* A molecular biology laboratory is defined as one capable of providing individuals with knowledge and practical experience in all aspects of molecular methods including, but not limited to, nucleic acid isolation, amplification, detection, sequencing, hybridization techniques, and data analysis.
**CMS CLIA certificate of registration, compliance, accreditation; OR
JCI accreditation; OR
Accreditation under ISO 15189

***A copy of the certificate of completion of the post-doctoral fellowship is required.

To fulfill the experience requirement for the Specialist in Molecular Biology examination, you must have laboratory experience within the time frame required in one of the following areas:

- Genetics/Genomics (e.g., genotyping, gene disorders, pharmocogenomics)
- Oncology (e.g., hematologic lymphoid neoplasms/neoplasia, solid tumor gene markers)
- Histocompatibility (DNA-based)
- Infectious Disease (molecular microbiology/virology)
- Molecular Identity Testing (e.g., bone marrow engraftment, paternity, forensic)

Experience is also required in two of the following procedures:

- Test development/validation
- Procurement of laboratory equipment
- Quality management
- Regulatory compliance
- Supervisory experience
- Teaching

International Specialist in Molecular Biology, SMB(ASCP)²

To be eligible for this examination category, an applicant must satisfy the requirements of at least one of the following routes:

**ROUTE 1:** MB(ASCP)² certification, AND a baccalaureate degree from an accredited/approved* educational institution, AND three years of acceptable experience (clinical, veterinary, industry or research) in a molecular biology laboratory** in an accredited/approved*** laboratory facility. These three years of experience must be acquired post baccalaureate degree.

**ROUTE 2:** Master’s degree in molecular biology, chemistry, biology, immunology, microbiology, clinical laboratory sciences, or an appropriately related field, from an accredited/approved* educational institution, AND three years of acceptable experience (clinical, veterinary, industry or research) in a molecular biology laboratory** in an accredited/approved*** laboratory facility. These three years of experience must be acquired post baccalaureate degree.

**ROUTE 3:** Doctorate in molecular biology, chemistry, biology, immunology, microbiology, clinical laboratory sciences, or an appropriately related field, from an accredited/approved* educational institution, AND two years of acceptable experience (clinical, veterinary, industry or research) in a molecular biology laboratory** in an accredited/approved*** laboratory facility.

September 2016
ROUTE 4: MB(ASCP) certification, AND a baccalaureate degree or master’s degree from an accredited/approved* educational institution, AND three years of acceptable experience as an academic educator in clinical molecular biology in an accredited/approved* educational institution. These three years of experience must be acquired post baccalaureate degree.

ROUTE 5: MB(ASCP) certification, AND a doctorate in molecular biology, chemistry, biology, immunology, microbiology, clinical laboratory sciences, or an appropriately related field, from an accredited/approved* educational institution, AND one year of acceptable experience as an academic educator in clinical molecular biology in an accredited/approved* educational institution.

*Accredited/approved by a governing regulatory association or Ministry. Countries without a prevalent system of accreditation/approval must have programs/educational institutions approved by an International Advisory Board appointed by the ASCP Board of Certification, or eligibility will be determined by transcript evaluation. The baccalaureate degree must be equivalent to a U.S. baccalaureate degree.

** A molecular biology laboratory is defined as one capable of providing individuals with knowledge and practical experience in all aspects of molecular methods including, but not limited to, nucleic acid isolation, amplification, detection, sequencing, hybridization techniques, and data analysis.

***Laboratory accredited by JCI, CAP, under ISO 15189 or authorized by a governing regulatory association or Ministry. Countries without a prevalent system of accreditation must have laboratories approved by an International Advisory Board appointed by the ASCP Board of Certification.

To fulfill the experience requirement for the Specialist in Molecular Biology examination, you must have laboratory experience within the time frame required in one of the following areas:

- Genetics/Genomics (e.g., genotyping, gene disorders, pharmacogenomics)
- Oncology (e.g., hematologic lymphoid neoplasms/neoplasia, solid tumor gene markers)
- Histocompatibility (DNA-based)
- Infectious Disease (molecular microbiology/virology)
- Molecular Identity Testing (e.g., bone marrow engraftment, paternity, forensic)

Experience is also required in two of the following procedures:

- Test development/validation
- Procurement of laboratory equipment
- Quality management
- Regulatory compliance
- Supervisory experience
- Teaching