

0403 – Microbiologist (Informatics)

Major Duties for This Position May Include:

- Manages projects involved with public health informatics and serves as a subject matter expert in the design and implementation of IT systems integrating microbiologic and other information from a scientific perspective.
- Provides advice on the application of IT to the development and promotion of uniform data elements in national health information systems.
- Knowledge of independent investigations and/or special projects of high complexity using sound judgment in the implementation of microbiological laboratory tests results and associated with test results.
- Serves as consultant and advisor to scientific and technical personnel and their contractors in a large variety of subject matter areas including specialized knowledge in microbiology with an emphasis on molecular diagnostics and antigen-based detection and characterization.

Related Competencies

- Microbiological Science
- Laboratory Practices
- Data Analysis and Management
- Problem Solving

Basic Requirements

Degree in microbiology, biology, chemistry, or basic medical science that included at least 20 semester hours in microbiology and other subjects related to the study of microorganisms, and 20 semester hours in the physical and mathematical sciences combining course work in organic chemistry or biochemistry, physics, and college algebra, or their equivalent.

or

Combination of education and experience to include courses equivalent to a major in microbiology, biology, chemistry, or basic medical science that included courses as shown above, plus appropriate experience or additional education.

Minimum Qualifications

In additions to meeting the basic requirements above, applicants must meet the minimum qualifications requirement as defined below:

GS-07 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-05 grade level in the Federal Service. Specialized experience for this position includes:

- Performing scientific work in microbiology and information system
- Coordinating efforts to apply laboratory informatics standards, policies, and procedures to improve interoperability between clinical and public health laboratories, public health agencies and other healthcare delivery.

Or Education

One full year of graduate level education.

Or Superior Academic Achievement

Based on a bachelor's degree that is demonstrated through class standing (upper 1/3 of class); grade point average (3.0/4.0 overall or 3.5/4.0 in major), or election to membership in a qualifying national scholastic honor society.

Or Combination

You may qualify on a combination of education and experience, the total percentage of experience at the required grade level compared to the specialized experience requirement, as well as the percentage of completed education compared to the educational requirement must equal at least 100 percent.

GS-09 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-07 grade level in the Federal Service. Specialized experience for this position includes:

- Performing and interpreting a variety of scientific operational methods molecular and biochemical tests to identify or determine the presence of microorganisms.

Or Education

2 years of progressively higher-level graduate education leading to a master's degree *or* master's or equivalent graduate degree if related. **TRANSCRIPTS REQUIRED.**

Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 18 semester hours (27 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED.**

GS-11 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-09 grade level in the Federal Service. Specialized experience for this position includes:

- Applying established scientific techniques to investigate and analyze various conventional problems and questions or to investigate and analyze discrete aspects of

more complex problems and standards related to improving laboratory data interoperability through collaboration with other organizations or agencies.

Or Education

Ph.D. or equivalent doctoral degree or three (3) full years of progressively higher-level graduate education. **TRANSCRIPTS REQUIRED.**

Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 36 semester hours (54 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED.**

GS-12 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-11 grade level in the Federal Service. Specialized experience for this position includes:

- Identifying and characterizing microbiological information for processing, computer management by analyzing laboratory procedures and processes as it relates to microorganisms and their reactions to the environment
- Experience in laboratory informatics terminology, organizations involved in development of codes

Note: There is no substitution of education for specialized experience at the GS-12 level.

GS-13 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-12 grade level in the Federal Service. Specialized experience for this position includes:

- Providing expertise as a scientist in the broad practice of public health informatics, planning
- Reviewing services on specific problems, projects, or programs, and operating conditions directly affecting populations.

Note: There is no substitution of education for specialized experience at the GS-13 level.

GS-14 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-13 grade level in the Federal Service. Specialized experience for this position includes:

- Applying advanced theories, principles, concepts, practices, standards, methods of microbiology, other biological science, and related fields sufficient to develop and coordinate policies and the overall program that will be applied throughout the assigned program
- Applying microbiologic and project management skills
- Understanding the complex policy issues influencing public and private information systems.

Note: There is no substitution of education for specialized experience at the GS-14 level.

Experience refers to paid and unpaid experience. Examples of qualifying unpaid experience may include volunteer work done through National Service programs (such as Peace Corps and AmeriCorps), as well as work for other community-based philanthropic and social organizations. Volunteer work helps build critical competencies, knowledge, and skills; and can provide valuable training and experience that translates directly to paid employment. You will receive credit for all qualifying experience, including volunteer experience.