

Histology

What is a histologist?

A histologist is a laboratory professional who has received specialized training in preparing human, animal, plant or other samples for examination and diagnosis by a pathologist. The histologist is concerned with cellular structure, chemical composition and function of normal and abnormal tissues. The specimen is processed with specialized equipment that allows the histologist to cut very thin sections (normally 4/10,000 of an inch), then treating with dyes and chemicals yielding a tissue section on a glass slide that exhibits tissue structure. The slide is then examined by a pathologist to evaluate normal or abnormal conditions.

What makes a good histologist?

Histologists have certain common characteristics: they are problem-solvers, like challenges, embrace responsibility, and appreciate the need for accuracy and reliability in their profession. Histologists work well under pressure and expect quality and commitment from themselves. They are deeply committed to their profession, being truly fascinated by all that science has to offer.



Paraffin ribbon containing tissue sample being prepared for placement on a microscope slide.

What is life like for a histologist?

Because the work of histology requires the preparation of samples as quickly as possible to allow the pathologist to communicate a diagnosis to the primary care provider, work hours often begin in the very early mornings. In larger hospitals and reference laboratories, the lab runs shifts that oftentimes provide 24/7 coverage, thus offering a variety of hours available to the histologist. The histologist must function as part of a team, every member of which is dedicated to producing quality work in a fast-paced environment. There is a certain amount of pressure to meet deadlines – your work may provide the critical piece of evidence needed to diagnose the patient, solve the crime or confirm the effectiveness of a new pharmaceutical.

How do I become a histologist?

To prepare for a career as a histologist, a student should have a solid foundation in high school sciences (biology, chemistry, math, and computer science). Clinical education is required in a histology training program accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) or an associate degree from a community college and training at a hospital. To ensure that the histologist is competent and able to perform high quality testing, the Board of Registry of the American Society for Clinical Pathology (ASCP) gives a national certification exam. Students take the exam after meeting their academic and clinical laboratory education requirements. Those who pass the exam may use the initials “HT (ASCP)” after their name to make known their proficiency in the field. It is highly likely that a histologist can begin work immediately upon completion of training.

What/Where are the jobs?

With current television series dealing with forensic pathology and crime scene investigation, attention has become focused on the importance of the laboratory professions in general and histology in specific. It is the smallest detail and the technician's knowledge and experience that are critical to diagnosis or solution. Without the histologist who has the expertise to provide this vital link, the pathologist cannot diagnose the condition for the surgeon, who in turn communicates with the patient's primary care provider to plan for resolution or care. Histologists have an unlimited choice of practice settings. Hospitals, reference laboratories, clinics, public health facilities and industry currently have positions open. Other opportunities include pharmaceutical and industrial research, anatomic and clinical pathology, forensic pathology, and marine biology. At this writing, there are more than 250 positions available across the country and the demand for histologists will only grow. Positions currently available can be found at the NSH website and many others, including <http://www.histologyjobs.com>.

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For more information

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10320 Little Patuxent Parkway, Suite 804
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(443) 535-4060
<http://www.nsh.org>

American Society for Clinical Pathology (ASCP)
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Chicago, IL 60603
(800) 267-2727
<http://www.ascp.org>
<http://www.ascp/Certification> (Board of Registry)

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
8410 West Bryn Mawr Avenue, Suite 670
Chicago, IL 60631
(773) 714-8880
<http://www.naacls.org>

Placement of a tissue specimen in liquid paraffin in preparation for sectioning on a microtome.

Photographs used in this article courtesy National Society for Histotechnology.

These resources will provide a wealth of information. More information on the profession can be found by using a search engine specifically targeting the words "histology", "histotechnology", "histotechnician", or "histologist".

For information regarding the New Mexico Society for Histology (NMSH), please email nmhisto@aol.com.