

## Cytogenetic Technologist

Laboratory tests play an important role in the detection, diagnosis, and treatment of diseases. Cytogenetic technologists study the morphology of chromosomes and their relationship to disease. Cytogenetic analysis provides important data for the diagnosis, prognosis, and treatment of genetic disorders and malignant diseases.



### Career Description

Cytogenetic technologists evaluate the correct method of collection, transport, and handling of various specimen types for cytogenetic analysis; identify culture techniques based on tissue type and reason for referral; and perform chromosomal staining, microscopic analysis, and karyotyping (organizing chromosomes according to a standardized ideogram). In addition to practicing good general laboratory skills, quality assurance principles, and safety protocols, cytogenetic technologists understand the legal implications of their work environment and exhibit appropriate ethical and professional health care standards while demonstrating professional conduct, stress management, and interpersonal and communication skills with patients, peers, other health care personnel, and the public.



### Employment Characteristics

Cytogenetic technologists are employed in hospital laboratories, private medical laboratories, and research facilities. They may also serve as faculty in cytogenetic education programs.



### Salary

Salaries vary depending upon the employer and geographic location. For more information, refer to [www.ama-assn.org/go/hpsalary](http://www.ama-assn.org/go/hpsalary).



### Educational Programs

**Length.** Programs are at least 1 year. Cytogenetic technologists attend a baccalaureate or postbaccalaureate program that includes professional and clinical education. Certification is desired by most employers.

**Prerequisites.** College courses and a number of required credits necessary to ensure admission of a student who is prepared for the clinical education program. College and university programs that integrate preprofessional and professional coursework are structured with professional courses in the junior and senior years or at the graduate level.

**Curriculum.** Cytogenetic technology programs are conducted in colleges and universities, hospitals, private medical laboratories, and other equivalent postsecondary educational institutions. The areas of study that must be included in either the professional program or as prerequisites are biology, chemistry, biochemistry or cellular biology, genetics, cytogenetics, hematology, microbiology, immunology, laboratory information systems, laboratory safety, and quality control.



### Inquiries

#### Careers/Curriculum

American Medical Technologists  
10700 West Higgins Road, Suite 150

Rosemont, IL 60018

847 823-5169

E-mail: [mail@amt1.com](mailto:mail@amt1.com)

[www.amt1.com](http://www.amt1.com)

American Society for Clinical Laboratory Science  
6701 Democracy Blvd., Suite 300

Bethesda, MD 20817

301 657-2768

301 657-2909 Fax

E-mail: [ascls@ascls.org](mailto:ascls@ascls.org)

[www.ascls.org](http://www.ascls.org)

American Society for Clinical Pathology

33 West Monroe, Suite 1600

Chicago, IL 60603

312 541-4999

E-mail: [info@ascp.org](mailto:info@ascp.org)

[www.ascp.org](http://www.ascp.org)

Association of Genetic Technologists

Executive Office

PO Box 15945-288

Lenexa, KS 66285

913 541-9077

#### Certification/Registration

American Society for Clinical Pathology

Board of Registry

PO Box 12270

Chicago, IL 60612

312 738-1336, Ext 1341

E-mail: [bor@ascp.org](mailto:bor@ascp.org)

[www.ascp.org](http://www.ascp.org)

National Certification Agency for Medical Laboratory Personnel

PO Box 15945-289

Lenexa, KS 66285

913 438-5110

E-mail: [nca-info@goamp.com](mailto:nca-info@goamp.com)

[www.nca-info.org](http://www.nca-info.org)

American Association of Bioanalysts

Board of Registry

906 Olive Street, Suite 1200

St. Louis, MO 63101-1434

[www.aab.org](http://www.aab.org)

American Medical Technologists

10700 W. Higgins Road, Suite 150

Rosemont, IL 60018

847 823-5169

E-mail: [mail@amt1.com](mailto:mail@amt1.com)

[www.amt1.com](http://www.amt1.com)

**Program Accreditation**

Dianne M Cearlock, PhD  
Chief Executive Officer (CEO)  
National Accrediting Agency for Clinical Laboratory Sciences  
5600 N River Rd, Suite 720  
Rosemont, IL 60018

773 714-8880  
773 714-8886 Fax  
E-mail: [dcearlock@naacls.org](mailto:dcearlock@naacls.org)  
[www.naacls.org](http://www.naacls.org)