



**Cytogenetic  
Technology**  
Bachelor of Science

THE UNIVERSITY OF TEXAS  
**MD Anderson  
Cancer Center**  
Making Cancer History®

# Cytogenetic Technology

Cytogenetic Scientists are puzzle solvers who seek answers to diagnosis and treatment questions by studying chromosomes and genes. They search for clues by using conventional and molecular DNA techniques and the latest computer imaging technology to study a single individual's chromosomes or genes. Often, it is the Cytogenetic scientist who first identifies a chromosomal abnormality or reports on the effectiveness of powerful therapy that targets a single genetic abnormality.

The program in Cytogenetic Technology is a highly intensive course of study. Students learn through extensive hands-on training at MD Anderson, using some of the most sophisticated equipment that is available today. Participants in the program become proficient in the major disciplines of cytogenetic testing including: chromosome identification, fluorescent in situ hybridization, comparative genomic hybridization and computer digital imaging.

## Program structure

This program's flexible structure allows working adults several options to complete a degree in Cytogenetic Technology including on campus part-time enrollment, on-campus full-time enrollment and hybrid online enrollment.

## Hybrid online program

Nearly 80% of the content is delivered online, including asynchronous delivered class content. Approximately 20% of the content is gained through direct campus participation. Students have access to online chromosome identification training through KaryoTutor and online course management software. Lab experience will be gained during a consolidated one-week lab session at the conclusion of each semester.

## Careers

Cytogenetic scientists are in high demand nationwide in clinical and diagnostic laboratories. They work in both cancer and constitutional genetics labs located in academic or research facilities, hospitals, outpatient medical facilities, lab services companies and biotechnology companies.

## Clinical education

Cytogenetic Technology students develop an in-depth knowledge and acquire sophisticated and up-to-date skills in the field of Clinical Cytogenetics. Formal classroom lectures are combined with the very latest equipment in highly specialized student labs. The curriculum includes the theory and hands-on practice of essential laboratory techniques associated with banding, chromosome analysis, Fluorescent in situ Hybridization (FISH), computer imaging, and array Comparative Genomic Hybridization (aCGH). This immersion in the field of Cytogenetic Technology fully prepares students for the 480 hours of guided clinical rotation hours that will complete their education.

- **In-person or on-line hybrid program**
- **Admits new students Fall semester only**
- **Full-time or part-time enrollment**
- **Degree completion in 1 or 2 years**

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[Cytogenetic Technology](#)

[Current affiliations](#)



# Competitive Application Process

The School of Health Professions admits new students once a year for entry each Fall semester.

Applicants will be selected through competitive and holistic admission process. A minimum overall GPA, prerequisite GPA, and prerequisite science GPA of 2.50 on a 4.0 scale is required for application. Meeting the minimum GPA does not guarantee acceptance.

## Required documents for application:

- Prerequisite coursework
- Online application, including essay
- Three professional recommendation forms
- Official transcript from each college attended
- TOEFL exam scores for international applicants
- Foreign college transcript should include a course-by-course and grade-by-grade evaluation from an approved agency

For a complete list of admission requirements, application deadlines, admission forms and a list of the prerequisite course requirements, visit [www.mdanderson.org/SHPapply](http://www.mdanderson.org/SHPapply)



[Learn more](#)  
about the  
undergraduate  
application



[Learn more](#)  
about the School of  
Health Professions

## Estimated costs

Based on 15 semester credit hours

<b>Texas resident</b>	Tuition and Fees   <b>\$2,300</b>
	Books and Supplies   <b>\$650</b>
<b>Non-resident</b>	Tuition and Fees   <b>\$8,400</b>
	Books and Supplies   <b>\$650</b>

## Tuition and fees

Cost of books and supplies vary by program. All students are required to be covered by health insurance. This expense is not reflected above.

## Financial aid

More than 87% of students attending the School of Health Professions receive some form of financial aid. Learn more about federal student aid and complete the Free Application for Federal Student Aid (FAFSA) online at [www.studentaid.gov](http://www.studentaid.gov)

While there is no application deadline for financial aid, it is recommended that students complete the required documents as soon as possible to be considered for institutional funds. Students should select the appropriate school code to avoid delays in the award process.

**FAFSA code: 017249**

## Scholarships

The School of Health Professions offers both guaranteed and competitive scholarships to newly admitted students.



[Learn more](#)  
about tuition  
and fees



[Learn more](#)  
about financial aid  
and scholarships