Clinical Laboratory Sciences

Clinical laboratory science, also called medical technology, is the health profession that provides laboratory services and analysis needed for the diagnosis, prevention, and treatment of disease. This profession combines numerous fields like chemistry, biology, medicine, lab analysis, and social work, making it a highly valued career. The well-rounded knowledge and versatile skills are used in testing blood, fluid, and tissue samples; contributing in a team of specialists; leading research and clinical research projects; operating, maintaining, and repairing clinical instruments; data entry, retrieval, and analysis; teaching proper laboratory practices; and problem solving.

At Stony Brook University, many students choose to double major in clinical laboratory sciences and biology or clinical laboratory sciences and chemistry because of the majors' complementary nature. Many students apply the skills learned to become a clinical laboratory technologist or clinical laboratory technician. The difference between the two is that clinical laboratory technologists analyze the data compiled from body fluids, tissues, bacteria, fungi, parasites, or microorganisms. In comparison, lab technicians prepare the specimens and operate laboratory equipment under the supervision of a technologist; they do not analyze data as frequently.

Transferable Skills

- Recognize and identify problems; synthesize solutions
- Efficiently and accurately compile data
- Assess and analyze an individual’s needs
- Interpersonal skills with patients and coworkers
- Complete work in an orderly fashion
- Medical knowledge and application
- Ability to make detailed observations
- Experimenting and analyzing
- Communicate professionally
- Knowledge of biology, chemistry, and lab sciences

Career Communities to Consider

- Healthcare
- Research
- Public Service
- Technology & Engineering