Halenz Hall, Room 326 (269) 471-3336 cls@andrews.edu http://www.andrews.edu/ALHE

#### **Faculty**

Marcia A. Kilsby, *Chair, CLS Program Director*Albert W. McMullen
Karen Reiner
Richard D. Show, *Graduate Program Coordinator* 

The Department of Clinical and Laboratory Sciences prepares students who are committed to preserving and protecting the dignity of life and death. They promote values and attitudes consistent with the Seventh-day Adventist Christian lifestyle. They strive to instill in students a life-long personal quest for individual growth and fulfillment and for continual excellence in health-care practice.

# CLINICAL LABORATORY SCIENCE MEDICAL TECHNOLOGY

The degree program includes three years of undergraduate (pre-clinical) studies plus one year (3 semesters) of clinical (professional) education.

**Pre-clinical Program.** The first three years of undergraduate study include General Education, cognate science, and pre-clinical degree requirements. Program options feature directed elective course work selected in consultation with the faculty advisor according to the student's career goals and interests.

Clinical (Professional) Program. The year of clinical studies is comprised of lectures and student laboratories on the Berrien Springs campus and clinical practica at an affiliated hospital or clinical laboratory site.

Clinical Experience (Practica). Students work side-by-side with practicing professionals in patient health care during the final portion of the clinical year. Andrews University maintains a number of affiliations with clinical institutions across the country. Student preferences for clinical site assignments are solicited and granted when possible. Final site assignments are made at the discretion of the faculty.

**Clinical Year Admission Requirements.** An independent admissions process is required for university students who wish to enter clinical studies. Application forms may be obtained from the Department of

Clinical and Laboratory Sciences office. Students should complete these applications and return them to the departmental office by January 31st prior to their anticipated clinical-study year.

Admission requires an overall GPA of 2.50. In the admissions process, the GPAs for the cognate science courses and clinical laboratory science content courses are computed together. This combined GPA must also be a minimum of 2.50. Should applications exceed class capacity, preference is given to students with the higher GPAs.

Applicants must be able to meet the program's published *Essential Functions*, copies of which are incorporated into the application packet, and express a willingness to comply with the principles, rules, regulations, and policies of both the university and the program as they relate to the ideals and values of the Seventh-day Adventist Church and the clinical laboratory science profession.

All prerequisite course work, including General Education, cognate science, and pre-clinical courses, must be completed prior to entry into the clinical year. A personal interview may be required at the discretion of the Admissions Committee.

In exceptional circumstances, the Admissions Committee may accept students outside the stated policy.

**Student Progression in Clinical Year.** The clinical year is highly structured and sequential. Enrolled students may not drop a class,

# UNDERGRADUATE PROGRAMS

# BS in Clinical Laboratory Science (BSCLS)—124

General Education requirements—32

(Adjustments for BSCLS)

Directed Electives

Arts & Humanities—3

Language/Communication

Social Science—3

Mathematics—3

AU students—Statistics preferred. Students transferring into clinical program—any college-level course

PE/Wellness—2

HLED120 plus one activity course. Must also pass a physician-administered physical exam before advancement to clinical practica

Physical/Natural Sciences: see cognate sciences below

Religion—12

(or one course per year of residence)

Service Fieldwork—fulfilled through 23 credits of clinical practicum.

#### Cognate Science Requirements—26

BIOL165: BIOL166 or 111; CHEM131, 132, 231, 232, 241, 242.

#### Major Requirements—61

Prerequisites—11

CLSC105, 110, 230, 250, 260

Major courses—50

CLSC320, 400, 401, 402, 411, 412, 413, 421, 423, 431, 432, 433, 441, 442, 443, 451, 452, 453, 460, 463, 495.

#### **Directed electives**

Students select courses in consultation with and by the consent of their advisors in a planned program to enhance professional preparation. Courses are chosen from biology, business, chemistry, computer science, electronics, and education. Pre-medical/pre-dental students must include PHYS141 142 General Physics (8 credits).

## BS: Allied Health Administration—65

This degree is designed for health-care professionals seeking to enhance the knowledge they already have and to help them prepare for future career employment requirements. The degree format features a strong general education and administrative/business component and provides an academic foundation for health-care administrative positions. It is open only to individuals holding an associate degree or a two-year certificate in an allied-health professional area

Business and Management Emphasis: ACCT635 (if not taken as part of the core), BSAD515, 530, 670, MKTG500, 540, NRSG517

*Education Emphasis*: EDAL520, EDCI547, 565, 636, 655, EDFN500, EDPC514, EDTE408, 424

**Enrollment Continuation Requirements.** A student whose cumulative graduate GPA falls below 3.00 in any given semester

Basic immunologic mechanisms. Theory of immunologic and serologic procedures. Immunologic manifestations in infectious diseases. Quality control in immunology. Prerequisites: CLSC320 and permission of Program Director.

CLSC423 (1)

# Clinical Immunology Practicum

Professional health-care laboratory practicum: emphasizes patient-care applications of immunologic and serologic procedures. Prerequisites: CLSC421 and permission of Program Director.

CLSC431 (4)

## Clinical Microbiology

Simulated clinical practice for the separation of normal flora from pathogenic microorganisms encountered in various body sites; emphasis on identification of pathogens, solving case histories and unknowns; study of antimicrobial mode of action and testing. Specimen collection, culture and identification of mycobacteria. Prerequisites: CLSC230 and permission of Program Director.

CLSC432 (2)

## Special Microbiology

Study of parasites, fungi and viruses involved in human infections. Emphasis on specimen collection and preservation, culture and identification procedures. Prerequisites: CLSC431 and permission of Program Director.

CLSC433 (5)

## Clinical Microbiology Practicum

Professional health-care laboratory practicum; emphasis in patient-care applications of bacteriology, mycology, parasitology, and virology. Prerequisites: CLSC431, CLSC432 and permission of Program Director.

CLSC441 (3)

#### **Immunohematology**

Blood grouping and typing; blood group antigen systems; compatibility testing; antibody identification; quality control and quality assurance; donor recruitment and selection; blood-banking records; grouping and compatibility problem solving; patient clinical state correlations. Prerequisites: CLSC260, CLSC320 and permission of Program Director.

CLSC442 (1)

TransfillsionMI eddicine

ever-changing government regulations and reimbursement policies require a laboratory manager to be flexible and adopt new skills. Issues faced by the manager and styles and strategies used to deal with these issues are explored. Prerequisite: Permission of Graduate Program Coordinator.

CLSC562 (3)

## Issues in Clinical Laboratory Regulations and Practice

Clinical laboratories are increasingly regulated by state, federal and other agencies. Applicable regulations will be examined and their impact on laboratory operations evaluated. A selected number of laboratory quality assurance procedures, as specified by CLIA '88 regulations, will be performed in the laboratory. Prerequisites: Statistics and permission of Graduate Program Coordinator.

CLSC585 (5)

## Advanced Studies in Clinical Laboratory Science

Designed in consultation with and coordinated by the area specialty advisor. Cumulative report, presentation, and defense required. Prerequisite: Certification and/or licensure as a clinical laboratory scientist and permission of Graduate Program Coordinator. Clinical placement depends on clinical site availability.

CLSC595 (1-4)

## Independent Study/Readings/Research Project

Topics may be from immunology, immunohematology, clinical chemistry, hematology, microbiology and other areas of patient-care science, clinical laboratory science education, management, or applications specially relevant to clinical laboratories. Repeatable in a different subject area for a total of four (4) credits. Independent readings earn S/U grades. Prerequisite: permission of Graduate Program Coordinator.

Nethery Hall, Room 209 (269) 471-6314; Fax (269) 471-3125 commdept@andrews.edu commgrad@andrews.edu http://www.andrews.edu/COMM/

#### **Faculty**

Delyse E. Steyn, *Chair*Pamela M. Harris, *Coordinator of Graduate Program*Tami K. Martinez
Beverly J. Matiko
Melchizedek M. Ponniah
Charles H. Tidwell (joint appointment)
Desrene L. Vernon

The Department of Communication offers a variety of undergraduate programs as well as a master's program. Interdisciplinary programs include Master's in Communication: Interdisciplinary Studies, Bachelor of Fine Arts in Art Direction/Advertising Emphasis, and Bachelor of Science in Communication Arts.