



# Clinical Laboratory Science Program

# Rapid City Regional Hospital's Clinical Laboratory Science Program

353 Fairmont Boulevard Rapid City, South Dakota 57701  
www.rcrh.org/clsp

**Affiliated with:** Augustana College, Sioux Falls, SD  
Chadron State College, Chadron, NE  
Northern State University, Aberdeen, SD  
South Dakota School of Mines & Technology, Rapid City, SD  
South Dakota State University, Brookings, SD  
University of South Dakota, Vermillion, SD

**Accredited by:** National Accrediting Agency for Clinical Laboratory Sciences  
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## *Formal Affiliations*

The Clinical Laboratory Science (CLS) Program at Rapid City Regional Hospital is formally affiliated with the following institutions:

**Augustana College**  
Sioux Falls, SD 57105  
Advisor: Mark Larson, Ph.D.  
*Biology Department*

**South Dakota State University**  
Brookings, SD 57007  
Advisor: Patricia Tille, Ph.D.  
*Chemistry Department*

**Chadron State College**  
Chadron, NE 69337  
Advisor: Ann Buchmann, M.S.

**South Dakota School of Mines & Technology**  
Rapid City, SD 57701  
Advisor: Josephine Lee, Ph.D.

**Northern State University**  
Aberdeen, SD 57401  
Advisor: Susan Landon-Arnold, Ph.D.  
*Division of Health Sciences*

**University of South Dakota**  
Vermillion, SD 57069  
Advisor: Kay Rasmussen, BS  
*School of Medicine*

*The institutions listed above grant academic credits for the senior year of professional study in an approved hospital based Clinical Laboratory Science Program.*

RAPID CITY REGIONAL HOSPITAL

***Clinical Laboratory Science Program***

Below is the official pin awarded to each Clinical Laboratory Science graduate. Within the oval is an engraved caduceus, the symbol of the medical profession. The Greek god, Mercury used the caduceus as a magic wand to control the living and the dead. The caduceus has wings at the top and snakes twined around it. Rapid City Regional Hospital's Clinical Laboratory Science Program selected the caduceus to symbolize the program's close association with the medical profession regarding clinical diagnosis and monitoring of disease states. The top of the pin contains the delicate Black Hills gold forms of the grape and vine in three beautiful colors.



*"To fly as fast as thought, to anywhere that is, you must begin by knowing that you have already arrived."*

—Jonathan Livingston Seagull by Richard Bach

***Program Officials***



**Timothy H. Sughrue**  
**CEO, Rapid City Regional Hospital**  
**COO, Regional Health**



**Susan L. Eliason, MD**  
**Medical Director Laboratory**

MD, USD School of Medicine  
Pathology Residency:  
USD School of Medicine  
Pathology Residency Program  
Vermillion, South Dakota



**Pam Kieffer, MS, CLS (NCA),  
MT(ASCP)**  
**Program Director**

BS, South Dakota State University  
MS, South Dakota State University  
MT Internship: Parkview Episcopal  
Hospital, Pueblo, Colorado

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## *Our Hospital*

Regional Health is a not-for-profit, integrated, community-based health care system serving a 38 county region, including over 365,000 residents in western South Dakota, southeastern Montana, northeastern Wyoming, southwestern North Dakota, and northwestern Nebraska. Regional Health has more than 40 health care facilities that include hospitals, nursing homes, clinics and assisted living facilities. Rapid City Regional Hospital (RCRH), one of five hospitals within the health care system, is a tertiary care facility with 417 hospital beds. Rapid City Regional Hospital employs over 2,500 health care professionals. The Hospital's mission statement, "To provide and support health care excellence in partnership with the communities it serves," directs its growth and development toward our community.



Rapid City Regional Hospital is a community-based hospital that is committed to preserving and strengthening health care for the people in our region. In partnership with Regional Health, RCRH is working to enhance the ability to provide appropriate, quality health care to community members within Rapid City and the Black Hills region.

Over the last several years, RCRH has added new programs and enhanced various existing services: cardiac and cancer care, diagnostic imaging, mobile CT scanning, laser surgery, neonatal intensive care, air ambulance, dialysis, psychiatric, a sleep disorder center, and rehabilitation programs are some to name a few.

Besides providing these and other advanced programs, RCRH also strives to keep the cost of services as low as possible. A master facility plan guides the hospital in its mission. The plan details the future growth and expansion of Rapid City Regional Hospital.

As we continue to strive to meet the health care needs of the people who live in our region, the commitment to quality health care, the people served, and the lives we touch has never been stronger. Rapid City Regional Hospital continues to meet the health care needs of the people who live in our region. The commitment to quality health care, the people served, and the lives touched have never been stronger.

## *Our Laboratory*

A 7,500 square foot laboratory is located on the main level of Rapid City Regional Hospital. Its facilities, equipment and technical capabilities, are among the finest in the Midwest. It is directed by a full time pathologist, and engages the services of five additional pathologists. The laboratory staff of 86 full time equivalents consists of 49 certified laboratory professionals, 32 phlebotomist and laboratory processors, and 5 secretarial staff.

The clinical laboratory, managed by a laboratory director, has specialty sections in Clinical Chemistry, Serology, Microbiology, Hematology, Coagulation, Clinical Microscopy, and Immunohematology. Each section has a supervisor experienced in that particular area. The laboratory serves, not only Rapid City

Regional Hospital, but also Regional Rehabilitation Institute, and acts as a referral lab for many clinics and smaller hospitals in the Black Hills area.

The clinical laboratory performs approximately two million procedures per year including standards and controls with an array of 400 different kinds of tests. It offers hands-on clinical experience of the latest automated equipment in each of the clinical sections, such as TDX, ECI and VISTA analyzers, Coulter laser cell counter with automated 5-part diff, and Microscan automated microbiology scanner. The laboratory is staffed 24 hours a day, 7 days a week, and operates as an immediate response laboratory.

Rapid City Regional Hospital's Clinical Laboratory is accredited by the College of American Pathologists and participates in both external and internal quality control programs.

## ***Our Clinical Laboratory Science Program***

The Clinical Laboratory Science Program offers a 45-week curriculum at the senior college level, leading to the granting of a baccalaureate degree in clinical laboratory science/medical technology and certification as a clinical laboratory scientist/medical technologist. Upon completion of the program, the graduate is eligible to write national certifying examinations conducted by the National Certification Agency for Medical Laboratory Personnel (NCA) and/or the American Society of Clinical Pathologists (ASCP), leading to recognition as a registered clinical laboratory scientist or medical technologist, respectively. Baccalaureate degrees are conferred on students by their respective college or university and are not contingent on any type of external certification or licensure examination.

Upon successful completion of this program, graduates are entitled to practice as clinical laboratory scientists/medical technologists. Upon successful completion of the NCA or ASCP exam they may use the credential "CLS (NCA)" or "MT (ASCP)". These examinations are recognized nationally, although some states do require separate endorsement by examination. Graduates are eligible to take such examinations. Rapid City Regional Hospital's Clinical Laboratory Science Program awards a certificate on completion of the program.

### **PURPOSE/GOALS**

The purpose and goals of the Clinical Laboratory Science Program is to

- Provide the community with qualified Laboratory practitioners
- Maintain an up-to-date accredited/approved program that prepares graduates to become certified and competent to work in the profession.

### **PHILOSOPHY & COMPETENCIES**

Rapid City Regional Hospital addresses its support of education in its mission statement:

***Our mission is to provide and support health care excellence in partnership with the communities we serve.***

The Clinical Laboratory Science Program accepts its responsibility to the community and endeavors to develop a clinical laboratory scientist who:

- Possesses the technical and theoretical knowledge to function as a generalist and the capability to adapt this knowledge to new situations.
- Is capable of problem solving, analyzing, evaluating, and making objective judgments.
- Exhibits communication skills in translating ideas and facts to a variety of persons both within and beyond the limits of the laboratory.
- Is highly motivated both academically and on the job, having a desire for continuing education and professional excellence.
- Is aware of his/her responsibility to the patients and shows concern for their welfare.
- Is dedicated to maintaining a standard of practice that earns respect from physicians, other health professionals, and patients.
- Possesses the maturity to accept responsibility for his/her own actions and to supervise the actions of others.
- Successfully completes the national certification examination in clinical laboratory science.

## ***Educational and Clinical Facilities***

### **LIBRARY AND CLASSROOM**

The Clinical Laboratory Science Program primarily uses space in the hospital complex. A laboratory library-conference room is located within the clinical laboratory department on the first floor of Rapid City Regional Hospital. It serves as the professional library for laboratory personnel, pathologists, medical students on pathology rotation, and clinical laboratory science students. This library collection includes approximately 750 volumes of books and bound periodicals, a large number of unbound periodicals, audiovisual equipment, and a special photographic microscope. This area doubles as a lecture/conference room for laboratory personnel, pathologists, and the Clinical Laboratory Science Program.

Classroom, student, lab, and study space for the CLS program is also near the laboratory and consists of student chairs, tables, chalkboard, podium, storage cabinets for audio-visuals, and audio-visual equipment. A select group of reference texts are also kept in this area.

Offices for the Medical Director, Laboratory Manager, and Pathologists are located within the laboratory as well. The Program Director's office is located next to the classroom.

A west educational wing accommodates Rapid City Regional Hospitals' meeting rooms, offices, and In-service Education Department. Additional classroom and lecture areas are available to the CLS program on a reservation basis, if needed. The Health Sciences Library is located adjacent to the laboratory and serves all allied health students and hospital personnel. It is staffed by librarians and includes a collection of approximately 10,000 volumes of books and periodicals.

### **CLINICAL FACILITIES**

During actual clinical rotation, students are rotated into the specialty clinical sections of the main laboratory. This design is one of open concept with a central immediate response area. Phlebotomy rotation includes pediatric and neonatal intensive care collections as well as rotation in the Respiratory Therapy Department to gain experience with arterial collection. Another laboratory, Clinical Laboratory

of the Black Hills (pathologist's private lab), is also used as an enrichment site for clinical rotation, specifically for training on additional automated instruments, as well as, a brief introduction to histopathology and cytology.

*Open design of our lab allows a central core to function as immediate response area for stat lab tests. The Emergency Department is located directly above the lab and samples can be sent via pneumatic tube system.*

## **STUDENT/FACULTY RATIO**

The clinical laboratory of Rapid City Regional Hospital has three full time and three associate pathologists and 49 full time clinical laboratory professionals on staff. The student/faculty ratio while in the clinical rotation is never more than two students/instructor, and is usually on a one to one basis. The program employs one full time staff member to administer the clinical laboratory science curriculum.

## **STUDENT CAPACITY**

The Clinical Laboratory Science Program has openings for ten students. The usual class size is 6 students.

## **OPPORTUNITIES IN CLINICAL LABORATORY SCIENCE**

There is a continuing need for the services of clinical laboratory scientists as qualified health professionals due to increased use of diagnostic tests and advancing technology. Positions exist in the clinical laboratory, from the generalist to the clinical specialist. Opportunities are also available in the areas of sales, research, public health agencies, armed services, pharmaceutical firms, veterinary laboratories, medical and reagent companies. Positions are available in both the United States and abroad. Many laboratory scientists (Appendix G) specialize in areas such as microbiology, immunohematology, management or education.

## **HOUSING**

No specified dormitory quarters are available to clinical laboratory science students. Rental apartments are available within the immediate area. Information on the desire to share an apartment with another student should be forwarded to the program director. Names and addresses of other clinical laboratory science students who wish to share an apartment will be provided. Arrangements for housing should be made prior to the starting day of class.

## **MEALS**

Meal tickets for the hospital cafeteria may be purchased at a discounted rate. The laboratory lounge has a refrigerator to store lunches. The noon lunch break is usually limited to 30 minutes, so it is more convenient to eat on the premises.

## **COUNSELING SERVICES**

The guidance program is coordinated through the program director to help students make satisfactory personal adjustments and to assist them to become productive members of the laboratory profession. These services begin with orientation and continue throughout the program. The program director and section supervisors are available to students for conferences. Students are encouraged to seek advice as needed. The student may also seek counsel from other faculty members and pathologists. Academic and disciplinary counseling sessions are documented and retained in the student's file.

## **TRANSPORTATION**

The clinical laboratory, classroom, library, and student laboratory area are all located within the structure of Rapid City Regional Hospital. The program uses two enrichment sites. One is the Clinical Laboratory of the Black Hills, which is within walking distance from the hospital (approximately one block). The other enrichment site is United Blood Services. Transportation to and from the student's personal residence, the enrichment sites, and the hospital is the student's responsibility.

## **HEALTH SERVICES**

A student health program is administered through Rapid City Regional Hospital's Employee Health Department. An Employee Health Nurse is available for basic first aid, consultative, and referral services. These services do not include medications, x-rays, or laboratory tests. Referral and consultation with the laboratory pathologists is also available to the clinical laboratory science student.

It is the responsibility of each student to promptly report any ailment and/or illness, however minor, not only for their personal protection, but also for the protection of patients and associates. Positive health habits are encouraged. Current immunization for diphtheria, tetanus, and poliomyelitis are required prior to admission. A tuberculin skin test within six months prior to enrollment date is required. Evidence of immunization of measles, mumps, and rubella is required. Hepatitis B vaccination is highly recommended. Biannual hepatitis monitoring and annual tuberculin tests are part of the student health program.

Expenses due to physician fees, prescriptions, prophylactic gamma globulin, laboratory, x-ray, operative procedures, dental, or optical care are the personal responsibility of the student. Students are required to show evidence that they carry hospitalization insurance prior to admission. This may be through a private plan, a student health plan from their affiliate college/university, or their parent's plan. Emergency health care is available through the Emergency Room of Rapid City Regional Hospital and would be available for any on-the-job injury or acute illness. On-the-job injury would be the responsibility of the hospital.

## **PROFESSIONAL ORGANIZATION AND LIABILITY COVERAGE**

Students are encouraged to pursue student membership in a professional organization (such as ASCLS). Membership includes such benefits as a professional magazine, reduced registration fees at workshops, and eligibility for group rates for life, accident, and liability insurance. Students are covered for liability of clinical practice at Rapid City Regional Hospital.

# ***Financial Aid***

Rapid City Regional Hospital's Clinical Laboratory Science Program participates in the major federal financial aid programs under Title IV of the higher education act. These include basic education opportunity grants, supplemental education opportunity grants, and scholarships. The student should apply for these through the financial aids office of their respective college or university. The program is also approved for veteran's benefits.

For qualified students who need financial aid, complete information, eligibility criteria, application forms, priority deadlines, and policies regarding financial aid should be obtained from the financial aid office of their respective college or university.

In addition to federal programs, the Clinical Laboratory Science Program has institutional loans and scholarships. These are limited in total dollars and designed to assist the student financially during the last six months of the clinical year of study. It is essential that students indicate their need and apply early for financial aid.

Students who need financial aid during the program should contact the program director about eligibility and policies regarding institutional financial aids.

## **PAYMENT OF TUITION AND FEES, APPENDIX F**

The tuition and fees are payable in full at the time of registration, with at least one-half payable immediately and the remainder due by January 15. Any student unable to pay these charges is required to discuss payment terms with the program director.

The student is responsible for supplying his/her own uniforms, meals, and living quarters. Protective lab coats are supplied by the laboratory. A breakage/reagent fee is charged if equipment breakage or negligent handling of reagents is excessive.

## **REFUNDS**

Upon approved withdrawal from the Clinical Laboratory Science Program, the following refund in tuition is made:

Withdrew within 2 weeks . . . . .	100%
Withdrew within 6 weeks . . . . .	50%
Thereafter . . . . .	No Refund

Payment/purchase of books is FINAL. Therefore, NO refunds for books shall be made by Rapid City Regional Hospital under any circumstances.

## **FINANCIAL INDEBTEDNESS POLICY**

Students who are in any way financially indebted to the Rapid City Regional Hospital CLS Program and/or who have failed to account for hospital or program property placed in their possession, and regardless of student status, shall be:

- Denied release of any student information including transcript.\*
- Suspended from official graduation\*, which includes the graduation ceremony AND registry eligibility.
- Subject to financial administration policies, regardless of student status (i.e. dismissed, withdrawn, etc.)

\*When a student has questions concerning his/her indebted status with Rapid City Regional Hospital Finance department, an appointment with the Finance department designee and/or CLS Program Director should be made.

**LENGTH OF PROGRAM**

The student spends 45 weeks (1800 hours) in the Clinical Laboratory Science Program. The 45 weeks are exclusive of holidays, excused absence, and/or vacation. Vacation is scheduled during Christmas and New Year's holidays. Other scheduled days off include Thanksgiving Thursday and Friday, July 4, Memorial Day, and Labor Day. Any time missed in excess of these days must be made up at the end of the 45-week period.

<b>PROGRAM CALENDAR</b>	
First Monday after July 4 . . . . .	Clinical program begins
September, first Monday . . . . .	Labor Day holiday
November, fourth Thurs & Fri . . . . .	Thanksgiving holiday
December, Christmas & New Year's . . . . .	Vacation
May, last Monday . . . . .	Memorial Day holiday
July 4th . . . . .	Legal holiday
Last Friday preceding first Monday in June . . . . .	Graduation

**FAIR PRACTICES**

Rapid City Regional Hospital's Clinical Laboratory Science Program adheres to the professional standards listed in the policy document "Fair Practices in Education". (Appendix B)

***Our Community***

**RELIGIOUS OPPORTUNITIES**

Rapid City Regional Hospital's Clinical Laboratory Science Program is a non-sectarian program. All students are admitted to the program using the same criteria. Students may attend services in the church of their choice.

**CULTURAL AND RECREATIONAL**

Rapid City is located at the base of the Black Hills. These black-green forests of Ponderosa Pine extend 120 miles long, 50 miles wide, and thousands of feet high. Black Hills caves, canyons, lakes, streams, and forests are natural settings for fishing, camping, boating, exploring, rock hunting, or skiing.

Students have an opportunity to enjoy these scenic and recreational activities year-round. Snow skiing, tobogganing, snowmobiling, water skiing, swimming, picnicking, hiking, rappelling, and horseback riding opportunities are all just minutes from Rapid City.

Events throughout the program year may include activities at the SD School of Mines and Technology-- football and basketball games, as well as cultural programs within Rapid City. The Dahl Fine Arts Center,

Black Hills Playhouse, and the Civic Center offer such community activities as plays, concerts, lectures, choral functions, and art displays.

There are many special events in Rapid City and surrounding communities.

## ***Admission Requirement***

The Clinical Laboratory Science Program does not discriminate with respect to age, sex, gender, marital status, pregnancy, race, color, religion, creed, national origin, genetic information, veteran's status, or disability, except those disabilities which may affect bonafide professional performance or academic standards. Preference is given to students from the affiliates of Augustana College, Chadron State College, Northern State University, South Dakota State University, South Dakota School of Mines and Technology, and University of South Dakota.

### **SCHOLASTIC**

Candidates must have completed required prerequisites of at least 90 semester hours in an approved college/university, which will culminate in a baccalaureate degree, or must have already been awarded a baccalaureate degree, which includes the prescribed courses listed below.

In accordance with current *Standards*, prerequisite content areas shall include: General Chemistry, Organic and/or Biochemistry, General Biological Science to include Anatomy/Physiology, Genetics/Molecular Biology, Microbiology, Immunology, and Mathematics to include Statistics. A course in immunology is required and a course in instrumentation is highly recommended.

The Essential Requirements provide criteria so that potential applicants can independently evaluate their own ability to meet these functions, participate in educational activities, and successfully fulfill the expected competencies required of a clinical laboratory scientist. These essential functions are in compliance with the current regulations of the Rehabilitations Act, the Americans with Disabilities Act, Civil Rights Act and the Standards of NAACLS. The Committee on Medical Technology Education (COMTE) requires that all applicants read and sign the form providing this description.

Survey courses do not qualify as fulfillment of chemistry and biological science prerequisites. Remedial mathematics courses will not satisfy mathematics requirements. Required prerequisite course work must be completed before the admission date. The content of chemistry, biological science and mathematics courses must be acceptable toward meeting the standards of a major in those fields or in clinical laboratory science or related allied health sciences, or certified by the college/university as equivalent.

The use of examinations (i.e., CLEP) for specific academic credit in order to fulfill requirements for admission to the Clinical Laboratory Science Program is at the discretion of the college/university and the student.

### **ELECTIVES**

Electives that would be useful in the Clinical Laboratory Science career field would be courses in communications, computer, philosophy, psychology, sociology, and physics. Electives should be selected

to complete the requirements for the baccalaureate degree and obtain a broad base general education background. Candidates should have attained a minimum of a 2.8 cumulative grade point average and a minimum of a 2.8 science grade point average. The candidate's most recent transcript should accompany the application. Applicants with GPA's between 2.5 and 2.8 are considered only after acceptance of candidates with 2.8 or higher.

Candidates must have completed all pre-clinical clinical laboratory science courses required by Rapid City Regional Hospital's Clinical Laboratory Science Program and must be eligible for the baccalaureate degree upon completion of the clinical program, if they do not already possess a baccalaureate degree.

Applicants who met the accredited program's minimum requirements seven or more years before application must update their academic preparation in a manner acceptable to the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). (Appendix D)

## **PERSONAL**

The clinical laboratory science profession consists of men and women with a high sense of integrity, reliability, and intelligence, whose predominant interest is to be of service in the clinical laboratory. The Clinical Laboratory Science Program's essential function, therefore, is to select applicants who will submit evidence of seriousness of purpose, emotional stability, scholastic ability, sound judgment through personal and academic references and personal interview. In addition, they should possess technical ability, an interest in clinical laboratory sciences, and a sense of responsibility.

## **HEALTH/DISABILITIES**

Sound physical, mental, and emotional health is necessary for those who plan to enter a clinical laboratory science program. The candidate must be equipped with hearing faculties, visual acuity, and communicative skills. The applicant needs to be able to perform minimum essential requirements including, but not limited to, functions associated with vision, psychomotor/movement, communication, behavior, intellectual and cognitive abilities and ethical standards. Before admission to the program, students must submit to a criminal background check. In addition, students must submit evidence of good health, via a health questionnaire and physician examination by their personal physician. Disabilities are evaluated on an individual basis by the program officials. The program is not routinely extended beyond the 45-week curriculum for individual disabilities. Neither does the program provide note takers or assistance in the classroom.

## **HOSPITALIZATION INSURANCE**

Prior to admission, students must show evidence of coverage for hospitalization. (See Health Services).

## **PREGNANCY**

Continuation of the clinical year in clinical laboratory science by a student who is or becomes pregnant after admission conforms to guidelines set by Rapid City Regional Hospital's Employee Relations Policy. Pregnant students are expected to maintain attendance and scholastic requirements. The usual leave of absence for confinement is six weeks.

## TRANSFERS

Transfer students from other clinical laboratory science programs are accepted if student space is available, if they are a student in good standing, and if approval from the transferring program officials has been granted. Placement in the program is determined on an individual basis. For credits to transfer, they must be a grade of C (2.0) or above. A student who plans to transfer must have not only the permission of the program officials of the transferring program, but also permission of the program officials of Rapid City Regional Hospital's Clinical Laboratory Science Program. Space availability for the transferring student must be within the approved student capacity of Rapid City Regional Hospital's Clinical Laboratory Science Program. Contacts should be made and completed at least one month before the entrance date. Receipt of acceptable grade transcripts, to include documentation of didactic and clinical experience, documentation of non-indebtedness to the transferring program, completed COMTE application, references, and interview summary sheet must be in the hands of RCRH Clinical Laboratory Science Program Officials before entrance is granted.

Such applicants must have completed at least one subject (lecture and lab) in its entirety or at least three months of training for credits to be transferred.

## *Training and Education*

### REGULATIONS RELATIVE TO GRANTING CREDIT FOR PREVIOUS TRAINING AND EDUCATION

NAACLS recommends the use of examinations for specific academic credit whenever feasible to fulfill requirements for admission and/or to shorten the clinical laboratory experience required to obtain the degree. Rapid City Regional Hospital's Clinical Laboratory Science Program concurs with this recommendation and will consider previous clinical education such as CLT (NCA), MLT(ASCP), and/or CLA(ASCP) certification in lieu of part of the clinical laboratory science program.

Such applicants must have completed the minimum academic and entrance requirements as detailed under admission requirements, and be enrolled in a baccalaureate degree program or have completed the degree. They must also submit evidence of previous approved experience (such as a master's degree in microbiology, immunology, or biochemistry) and/or certification as CLT (NCA) or MLT (ASCP) and have references indicative of such advanced placement. **CLEP Examinations are not offered in the area of clinical education.** Advance placement is feasible at the discretion of the program director, teaching technologist and the applicant. It will be considered using the guidelines listed below:

No more than six months of the clinical program can be deleted. Each student challenging a portion of the clinical year will be evaluated as to practical performance proficiency and theoretical knowledge in a respective specified clinical area of laboratory medicine. This evaluation will be based upon:

- A. Written examinations covering cognitive, psychomotor, and affective domains at a variety of levels. Students must attain a score of at least 70 percent (C).
- B. Practical examinations with unknown clinical specimens. Students must attain a score of at least 80 percent (B).
- C. Oral quizzes. Student must attain a score of at least 80 percent (B).

D. Clinical evaluation of technique. Student must score at least 80 percent (B).

This evaluation is completed only after a period of introductory rotation into the specific laboratory section being challenged for advanced placement. Results are assessed by the program officials and teaching technologist. A determination is then made as to the length of additional clinical and didactic training needed. These results are reviewed with the student.

## **ADMISSION DATES**

Rapid City Regional Hospital's Clinical Laboratory Science Program has only one admission date per year. This is routinely the first Monday after July 4. The only exceptions would be the acceptance of an advanced placement or transferring student. Filing of application should meet the deadline date.

## **APPLICATION PROCEDURE**

Applications must be filed through a central committee called COMTE (Committee on Medical Technology Education). COMTE's membership includes program officials from the South Dakota Clinical Laboratory Science Programs and St. Luke's Medical Center and Mercy Medical Center, both in Sioux City, Iowa. COMTE application packets can be obtained from the various websites of the hospital-based programs.

### ***Instructions for the applicant:***

1. Complete the application form completely and include a transcript of college credits showing courses in progress and planned. Also include the application fee. The fee is not refundable.

### ***Deadline for filing the application form is October 1.***

2. Contact three references, two of which should be science instructors and one from a former/current employer. Have them complete the reference forms included in the application packet. These references are to be mailed directly to the COMTE coordinator.

### ***Deadline for receipt of references is October 15.***

3. Your first choice hospital program official will contact you and arrange an interview with you.

### ***Interviews are usually scheduled during late October and/or early November.***

4. Review of the completed application, scoring and selection of candidates is accomplished in December with notification of acceptance or alternate status in December or early January.

Rapid City Regional Hospital's Clinical Laboratory Science Program accepts students on a conditional basis, pending receipt of favorable physical examination results and favorable completed transcript.

The objective of the COMTE matching system is to match qualified students with a program based on available program positions and student program preference. The COMTE Coordinator,

in consultation with the Program Directors, will match the students and programs. The first-to-first choices will be matched first, followed by the second-to-second, etc. until all matching within the applicant's three choices has been completed. An effort will be made to assure placement of high-ranking applicants, even though not matched within the first three choices.

Meeting minimum requirements does not guarantee admission.

5. Once you have been notified of acceptance, you must confirm or reject the appointment within one week. Some programs require a deposit payable on acceptance.

***Confirm appointment within one week.***

6. The COMTE coordinator is notified of any cancellations. Alternates are alerted if an opening should occur and then may be offered the opportunity to accept that opening if it occurs prior to or within two weeks of the starting date of the scheduled class.

**STUDENTS WHO HAVE PREVIOUSLY APPLIED**

Applications and credentials are kept on file for one-year. The applicant must notify the COMTE coordinator if he/she wants to be reconsidered for the up-coming class and should update the original application or resubmit a new application form. References, transcripts, and interview credentials do not have to be resubmitted unless the applicant wishes to strengthen his/her candidacy due to additional information of grade point average, work habits, etc.

**STUDENTS WHO WISH TO RE-ENTER RAPID CITY REGIONAL HOSPITAL'S CLINICAL LABORATORY SCIENCE PROGRAM**

With reference to voluntary withdrawal or leave of absence, re-admission to the program is contingent upon past records and space availability. Re-admission of students dismissed for academic or disciplinary reasons would not be considered unless such dismissal was due to illness or other correctable circumstances. Students do have the right of appeal. (Refer to section on Appeals Procedure and section on Training Interruptions).



**ATTENDANCE AT CLASS AND CLINICAL LABORATORY**

Students are expected to attend all classes, clinical laboratory rotations, officially scheduled workshops and assemblies. When an absence is unavoidable, the student should alert the program director or section teaching technologist prior to absence, if possible. Each scheduled day is 8 hours, inclusive of study, class, or clinical time.

***Irregular attendance is considered as an academic cause for warning and dismissal.***

## **REGULATIONS RELATIVE TO ABSENCES, INTERRUPTIONS**

Since the total length of the program is 45 weeks (1800 hours), excluding personal vacation days, any excused absenteeism beyond this must be made up after the regular scheduled curriculum. Time cannot be made up on weekends, evenings, or holidays. Any make-up time must be scheduled with the program director.

It is recognized that interruptions may occur for various acceptable reasons, such as an accident, ill health, or pregnancy. Each request for interruption of the program will be considered on an individual basis. When a subject has been completed in its entirety, including both lecture and clinical rotation, credit will not be lost by interruption of the program. Partial credit would be given if at least three months of the program had been completed. Reentrance for such interrupted training is dependent on space availability, academic standing at the time of the interruption, and length of interruption interval. Interrupted training must be reinstated within a two-year period. The clinical laboratory science program does not have a leave of absence policy.

Class absenteeism, tardiness, and interruptions due to unsatisfactory attendance are not allowed and are cause for academic warning, probation, and/or dismissal from the program.

## **WITHDRAWAL OF STUDENTS**

Students wishing to withdraw from the program must give written notice to the program director, stating the reason for withdrawal. They must then arrange for an exit interview with the program director. (See Counseling Service).

The program officials of the Clinical Laboratory Science Program may request the withdrawal of a student at any time if conduct, ability to practice clinical laboratory science, or other circumstances, such as persistent absence, indicates that it would be inadvisable for the student to remain in the program. (See Academic Standards/Regulations, Appendix E).

## **RULES AND REGULATIONS, COMPLIANCE WITH**

Students are responsible for complying with the operational policies and regulations of the hospital, as well as the Clinical laboratory Science Program, including, without limitation, those relating to the confidentiality of patient and Hospital records, including privacy rules delineated in the Health Insurance Portability and Accountability Act (HIPAA), and of the responsibility and authority of the medical, professional and administrative staffs for patient care and for hospital health care administration. A student enrolling in Rapid City Regional Hospital's Clinical Laboratory Science Program assumes an obligation to conduct himself/herself in a manner compatible with the institution. Rules are defined to acquaint all students with their rights and limitations, thereby avoiding thoughtlessness or deliberate infractions. Special notices may be placed on the chalkboard in the laboratory proper, the CRT screen, or official laboratory and/or Clinical Laboratory Science Program tack boards. Students are responsible for observance of such official notices.

## *Course of Study*

The 45-week course of study includes lecture, technical instruction, assigned reading, audio-visual aids, and supervised experience in the clinical laboratory of Rapid City Regional Hospital. It also includes limited clinical experience and exposure to other types of instrumentation at the Clinical Laboratory of the Black Hills, a private outpatient laboratory directed by our pathologists. Students also spend some time observing donor selection and component processing at United Blood Services of South Dakota. Both facilities are considered enrichment sites to broaden clinical exposure. The program incorporates formal didactic teaching methodologies and practical performance of widely recognized laboratory tests using an array of analytical procedures and state-of-the-art instrumentation, including a dedicated laboratory computer. Students rotate through specific clinical sections under the supervision of teaching technologists. Students perform assays in sufficient quantity to gain proficiency, confidence and skill in all phases of the clinical laboratory.



## **Clinical Laboratory Science Curriculum\***

### **BASIC GOAL:**

To provide selected individuals with science-oriented educational backgrounds with the necessary knowledge base and practical experience to perform as a clinical laboratory scientist in a modern clinical laboratory and to enable them to make independent decisions regarding the laboratory procedures used in the diagnosis, study, and treatment of disease.

<b>SUBJECT</b>	<b>LECTURE/STUDENT LAB/EXAM HOURS</b>	<b>CLINICAL</b>
Orientation	50	
Phlebotomy	20	100
Urinalysis/Body Fluids	40	30
Hematology/Coagulation	100	240
Microbiology	190	300
Serology/Immunology	30	130
Chemistry/Instrumentation	130	260
Immunochemistry/Blood Bank	60	200
Education	20	
Management	20	40
Finals	40	
Vacation/Personal Leave/Holidays	80	
<b>Totals</b>	<b>780</b>	<b>1300</b>
*Subject to annual review and modification.		

# **COMTE**

## ***Affiliated Hospital-Based Clinical Laboratory Science Curriculum***

A structured curriculum for the clinical year of professional study at an affiliated hospital-based Clinical Laboratory Science Program includes:

- Theory and Principles
- Methodologies and Instrumentation
- Problem Solving, Quality Assurance, and Computer Applications
- Clinical Significance and Correlation of Laboratory Procedures (in the diagnosis and treatment of disease processes)

The curriculum encompasses six MAJOR subject areas commonly offered in the modern clinical laboratory.

These six major subjects are:

- CLINICAL MICROSCOPY/ URINALYSIS/BODY FLUIDS
- CLINICAL HEMATOLOGY/COAGULATION
- CLINICAL MICROBIOLOGY
- CLINICAL SEROLOGY/IMMUNOLOGY
- CLINICAL CHEMISTRY/INSTRUMENTATION
- CLINICAL IMMUNOHEMATOLOGY

It also includes SPECIALIZED UNITS OF INSTRUCTION (SPECIAL TOPICS) that may be offered as separate courses, clustered together, or included within one of the major subject areas.

***These specialized units are:***

- Introduction/Orientation to Clinical Laboratory Science
- Phlebotomy
- Computer Applications in the Clinical Laboratory
- Laboratory Mathematics/Quality Assurance
- Management/Supervision
- Educational Methodology
- Introduction to Research

Clock hours (didactic and practical), as well as, placement of these specialized units within the clinical year, account for the diversity of credit hours per subject area assigned by the hospital affiliate. The total semester credit hours recommended by COMTE (Committee on Clinical Laboratory Science Education) for transcript posting is 40 semester hours. However, this is subject to final posting by the academic institution.

# *Course Descriptions*

## **MAJOR SUBJECTS: Range of Semester Hour Credit**

- 1. CLINICAL MICROSCOPY/URINALYSIS/BODY FLUIDS** **2-3 sem. hrs.**  
Lecture, supervised laboratory instruction, quality control, instrumentation, computer applications, experience with body fluids and urine in regard to chemical and cellular composition, anatomy and physiology, and theory of renal function in health and disease.
- 2. CLINICAL HEMATOLOGY/COAGULATION** **5-8 sem. hrs.**  
Lecture, supervised laboratory instruction, quality control, instrumentation, computer applications, and experience in the analysis of cellular elements of the blood and bone marrow, both normal and abnormal, and on the hemostatic mechanisms of the blood.
- 3. CLINICAL MICROBIOLOGY** **8-12 sem. hrs.**  
Lecture, supervised laboratory instruction, quality control, instrumentation, computer applications, and experience in the isolation and identification of pathogenic organisms and their susceptibility to anti-microbial agents. Microbiology includes Bacteriology, Mycology, Parasitology, and Virology.
- 4. CLINICAL SEROLOGY/IMMUNOLOGY** **2-3 sem. hrs.**  
Lecture on antigen/antibody structure-function-interactions, supervised laboratory instruction, quality control, instrumentation, computer applications, and experience in applying the principles of immunology to diagnosis.
- 5. CLINICAL CHEMISTRY/INSTRUMENTATION** **8-12 sem. hrs.**  
Lecture, supervised laboratory instruction, quality control, computer applications, instrumentation, and experience in medically oriented biochemistry as applied to normal and abnormal physiology and analysis of body constituents. This section includes analysis of special body fluids such as amniotic, synovial, cerebrospinal, gastric, and pleural fluids. It also includes special procedures utilized for toxicology, and endocrinology.
- 6. CLINICAL IMMUNOHEMATOLOGY** **4-6 sem. hrs.**  
Lecture, supervised laboratory instruction, quality control, instrumentation, computer applications and experience in theory and practice of immunohematology as applied to blood transfusion, component therapy, autoimmune diseases, immunologic diagnostic procedures, and blood component preparation and administration.

# Course Descriptions

## SPECIALIZED UNITS (SPECIAL TOPICS)

## Semester Hours Credit

### 1. ORIENTATION TO CLINICAL LABORATORY SCIENCE

0-1 sem. hrs.

#### A. Introduction

Introduction to basic techniques, principles of safety, infection control, professional ethics, personal and professional responsibilities in the clinical laboratory. Review of program's rules and regulations. Introduction to clinical significance of laboratory procedures in diagnosis and treatment.

#### B. Phlebotomy

Anatomy and physiology of the arm, blood collection techniques from vein, capillary, artery and difficult draw sites. Specimen variables and handling techniques. Interactive communication skills with patients and para-professionals.

#### C. Computer Applications in the Clinical Lab

An introduction to techniques, principles, and concepts common in laboratory data processing systems. Utilization of mini-computers in the laboratory and within instruments.

#### D. Laboratory Mathematics/Quality Assurance

Laboratory oriented mathematics with emphasis on performing calculations related to units of measure, pH, Beer's Law and calibration curves, Henderson-Hasselbach equation, enzyme activity, renal clearance, gastric acidity, hematology calculations. Principles and practices of quality assurance. Includes statistical techniques, method evaluation, and pipette calibration.

### 2. MANAGEMENT AND SUPERVISION

0-4 sem. hrs.

Lectures and/or seminars on theory and techniques of laboratory oriented management practices utilized in planning, organizing, directing, controlling and supervising a clinical laboratory facility.

### 3. EDUCATIONAL METHODOLOGIES

0-4 sem. hrs.

Lectures and/or seminars on the principles of education. Includes methods of instruction, writing objectives, and evaluation devices for didactic and clinical practice.

### 4. INTRODUCTION TO RESEARCH

0-1 sem. hrs.

Faculty-guided study, research, scientific writing, case study presentations and/or projects in specialty area(s) of clinical laboratory science.

## TOTAL SEMESTER CREDIT HOURS

40

*Exact hours of credit may vary slightly with individual clinical programs and with different academic affiliates. (See chart)*

COURSES	SEMESTER CREDIT HOURS	
	SDSU/NSU CSC/SDSM&T	USD AUGUSTANA
Orientation	0	0
Phlebotomy	0	0
Chemistry/Body Fluids	11	11
Hematology/Coagulation	7	8
Immunoematology	5	6
Immunology/Serology	2.5	2
Microbiology/Mycology	11	10
Urinalysis	2	2
Intro to Administration	0.5	1
Intro to Education	0.5	0
Intro to Research	0.5	0

## *Academic Policies*

### GRADING AND GRADUATION

The program director keeps records of each student's progress in theory and clinical. These records are used by the program's officials to determine the progress made by each student. Action is recommended for any student failing to achieve a grade of C in didactic instruction and/or a grade of B in clinical instruction. Recommendations include warning (didactic or clinical), probation, and/or dismissal.

### CRITERIA FOR PASS/FAIL DECISION

1. A student must pass all courses and have a \*minimum grade point average of 70% in didactic and a minimum grade point average of 80% in clinical practice in each of the clinical subjects defined in the curriculum. The grading and honor point system follow the policy of state universities and colleges.
2. None of the clinical subjects are offered with a pass/fail option of grading.
3. The grading and honor point system are:

Grade	Definition	%	Honor Point
A	Excellent	90-100	4.0
B	Good	80 -89	3.0 Pass
C	Satisfactory	70 -79	2.0
D	Not Satisfactory	60 -69	1.0
E	Inferior Work	<60	0.0 Fail
WF	Withdrew Failing		0.0
WP	Withdrew Passing	<i>(Registration cancelled)</i>	
I	Incomplete	<i>(% and Honor Points calculated when a grade is changed to a passing mark)</i>	

4. The program director evaluates the student's progress in theory. The clinical instructors evaluate the student's progress in clinical practice. Both use evaluation instruments derived from the objectives of each course. Evaluations at the end of each didactic and clinical block are made to determine a student's academic achievement. Students review each interim evaluation. Grades may not be changed after the program director and student have reviewed them and they have been recorded on the student's official progress report. Final grades are provided to all students at the end of the 45-week program.
5. Written progress reports are sent to the on-campus clinical laboratory science advisors at least twice during the 45-week program. If the student is performing unsatisfactorily, the advisor is notified as well. Progress reports represent grades given for:
  - A. Technical ability exhibited during clinical rotation, including theoretical knowledge, interpretive skills, and laboratory exercises.
  - B. Periodic examinations on lectures and reading material in the major clinical subject areas offered by the program.
6. A majority of the courses in the Clinical Laboratory Science Program consist of both theory and clinical practice. The student must complete all course requirements for both, within the academic frame to pass the course. The final grade of each is decided on the basis of:
  - A. Didactic - written examinations over lecture and demonstration material.
  - B. Clinical - performance on practical examinations, written or oral, bench performance, and exhibited knowledge of theory and interpretation.

The weight of each (didactic and clinical) is equal. Three grades are posted as the final grades – didactic final, clinical final and total final. Management and education are offered primarily as theory courses with project assignments.

7. Scholastic averages are computed in terms of percentages and converted to grade points at the completion of each course (lecture, student practicum, and clinical rotation). Satisfactory course average must be at least 70 % in didactic and at least 80% in clinical to pass that subject area.
8. The program director may choose to give an incomplete (I) to a student when a valid circumstance makes it impossible to complete the course by the assigned date.
9. A student who does not maintain a satisfactory standing in a course is provided constructive counseling by the Program Director and/or instructor. If performance does not improve, the student is given a verbal warning, initiating the disciplinary action policy (CLS 003). A warning may be given for didactic theory or clinical practice and may be given when the student's performance is in question.
10. **\*A grade average below 70 percent (C) in theory or below 80 percent (B) in clinical practice places the student on probationary status for the remainder of the course.** The teaching technologist informs the program officials when a student's achievement is not satisfactory and requests a review of the student's progress. A student placed on probation by the program officials is given notice by the program director stating that he/she is not meeting the

objectives of the course and therefore has been placed on probation. Disciplinary action is initiated according to policy CLS 003. Probation is a period within the academic time frame (e.g., one month) for determining the qualifications or abilities of a student to meet the objectives or to display appropriate behavior for the program. During the period of probation, the student will be under the close supervision of the program director and the teaching technologist. Specific goals will be established for the student to attain. Continuous evaluation is carried on throughout the period of probation. If performance improves consistently, no further action is taken at this time. If performance does not improve, the disciplinary action policy proceeds to step two – written warning. A student who is on academic probation must attend all classes and clinical practice. Failure to attend all classes and clinical practice sessions will force the student to be considered by the program officials to have withdrawn failing. A student who has been placed on probation more than once may be dismissed from the program. The student has the right to appeal according to an established program policy. (See Grievance/Appeal Procedures).

11. A student may also be given a warning or placed on probation for behavior that is contrary to and/or reveals a lack of responsibility in relation to standards of laboratory practice as maintained by the program in clinical laboratory science. **Non-professional behavior is considered academic cause for probation and/or dismissal.** The program reserves the right to dismiss any student whose attendance proves detrimental to co-workers and/or patients. (See Academic Standards/Regulations, Appendix E.)
12. Any student problem with progression is considered on an individual basis. Should a student fail to attain a minimum grade point average of 70 percent in didactic and/or a minimum grade point average of 80 percent in clinical practice in one or more of the subject areas, consideration for extending clinical training and/or retaking alternate but equivalent examinations is dependent upon the review of the student's academic records and clinical performance in all areas by the program officials. Possible extenuating circumstances causing non-satisfactory or incomplete work must be justifiable, such as illness or excused absence. In no case will more than one additional retake exam be allowed or academic extension be beyond one month.

## **GRADUATION REQUIREMENTS**

Each student is responsible for completing the requirements for graduation as specified in the curriculum. To graduate, the student must satisfactorily complete the courses in the Clinical Laboratory Science Program and demonstrate satisfactory laboratory performance. The student must also be free of indebtedness to the Clinical Laboratory Science Program.

## **CONFIDENTIALITY OF RECORDS**

The Clinical Laboratory Science Program complies with the Education Rights and Privacy Act of 1974. A student is provided access to his/her own records. Written consent of the student must be obtained before any personally identifiable information is released, other than the specified list of exceptions in the Act.

## **TRANSCRIPTS**

Final grade reports are sent to the on-campus clinical laboratory science advisors and the registrar of each student's respective college or university. If the student is a candidate for the baccalaureate degree, these grades and credits will be posted to and become a permanent part of their official college transcript.

If the student already possesses a baccalaureate degree prior to his/her entrance into the clinical laboratory science program, a transcript of grades is given to him/her. This student may request a second baccalaureate degree (if their college grants degrees in clinical laboratory science) or ask that this transcript of clinical laboratory science courses be posted to their official transcript as transfer credit. In this case, the Clinical Laboratory Science Program will send valid transcripts of the student's grades and credits to his/her respective college/university.

*Official transcripts from the Clinical Laboratory Science Program are available from the school on written request of the student/graduate for a fee of \$5.*

*Transcripts are not released to students/graduates having any indebtedness to the Clinical Laboratory Science Program without first being reviewed by the program officials.*

## **HONORS**

All who are graduating are to attend graduation activities. The graduates receive a certificate attesting to their successful completion of the year of professional study in the clinical laboratory sciences, and are awarded a school pin.

## **APPEALS PROCEDURE (Academic & Non-academic)**

The appeals mechanism is designed to review valid appeals or complaints in a fair, impartial and timely manner and resolve causes of dissatisfaction in an orderly and systematic process. An appeal procedure is provided to resolve issues that have not been resolved through normal channels (discussion with instructor and student). Students who believe they have been unfairly evaluated, graded or disciplined have the right to appeal. The procedure is listed below:

- Step 1: If the student has a formal appeal or grievance, it should be first presented in writing to his/her immediate supervisor, the program director. The appeal/grievance must be presented within one week of its occurrence or within three days after the student did or "should have" gained knowledge about it. The student will receive a written response within one week from the presentation. If the student is satisfied and accepts the supervisor's decision, the appeal/grievance is over. If not the student should proceed to step 2.
- Step 2: The student submits a complete written summary of the complaint to the Clinical Laboratory Science Program's Medical Director. The student will receive a written response within one week of the presentation of the appeal/complaint. If the student is satisfied and accepts the decision, the appeal/grievance is over. If not, the student should proceed to step 3.
- Step 3: A complete written summary of the appeal/complaint is given to the Chairman of the Grievance Committee\*. A hearing date will be scheduled that is convenient to all within two weeks of the

appeal/complaint being received by the Committee. The student will receive a decision from the Committee within one week of the close of the hearing. The Committee's decision is considered final and binding.

**\*Committee members include:**

- a) Chairman: Pathologist who is not the Medical Director
- b) Two Clinical Laboratory Science Program faculty members who have adequate contact with the student
- c) One fellow student member
- d) One Program Official of the Clinical Laboratory Science Program
- e) One member of the affiliate academic institution, if feasible and applicable (3+1 programs only)

The student does have the right to amend his/her educational record; i.e., include his/her version.

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# *Appendix A*

## **American Association of Blood Banks (AABB)**

8101 Glenbrook Road  
Bethesda, MD 20814-2749  
(301) 907-6977

## **American Association for Clinical Chemistry (AACC)**

2029 K. St. NW, Seventh Floor  
Washington, SD 20006  
(202) 857-0717 or (800) 892-1400

## **American Society of Clinical Pathologists (ASCP)**

33 West Monroe St., Suite 1600  
Chicago, IL 60603  
(312) 541-4999

## **ASCP Board of Registry (BOR)**

P.O. Box 12270 • Chicago, IL 60612  
(312) 738-1336

## **American Society for Clinical Laboratory Sciences (ASCLS)**

7910 Woodmont Ave., Suite 530  
Bethesda, MD 20814  
(301) 657-2768

## **American Society for Microbiology (ASM)**

1325 Massachusetts Ave., NW  
Washington, DC 20005  
(202) 737-3600

## **American Society of Phlebotomy Technicians (ASPT)**

P.O. Box 1831  
Hickory, NC 28603  
(704) 322-1334

## **Centers for Disease Control (CDC)**

1600 Clifton Road NE  
Atlanta, GA 30329-4018  
(404) 639-3311

## **Clinical Laboratory Management Association (CLMA)**

9 Old Lincoln Highway, Suite 201  
Malvern, PA 19355-2135  
(215) 647-8970

## **College of American Pathologists (CAP)**

325 Waukegan Road  
Northfield, IL 60093-2750  
(708) 446-8800

## **Committee on Medical Laboratory Education (COMLE)**

## **Committee on Medical Technology Education (COMTE)**

## **National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)**

5600 North River Road  
Suite 720  
Rosemont, Illinois, 60018  
(773) 714-8880

## **National Certification Agency for Medical Laboratory Personnel (NCA)**

P.O. Box 15945-289  
Lenexa KS 66285  
(913) 438-5110

## **Clinical and Laboratory Standards Institute (CLSI)**

940 West Valley Road, Suite 1400  
Wayne, PA 19087-1898 USA  
(610) 688-0100

## **Occupational Safety and Health Administration (OSHA)**

200 Constitution Ave., NW  
Washington, DC 20210-0001  
(202) 523-8148

## *Appendix B*

### *Fair Practice in Education*

Rapid City Regional Hospital's Clinical Laboratory Science Program considers the following among factors in evaluation of the fair practices of this program:

1. The program must be educational and students should use their scheduled time for educational experiences.
2. Academic credit and tuition must be fair; program shall not assign excessive credit for course work as a means of obtaining increased tuition income.
3. Announcements and advertising must reflect accurately the program offered; advertising of the program must not be misleading or characterized by misrepresentation.
4. Students and faculty recruitment practices are responsible; recruitment is not based on misrepresentation. For example, overstatement of financial rewards of careers within a given field may lead to unrealistic income expectations on the part of students.
5. Financial arrangements are fair to the students and to the school. For example, there is no encouragement of students to enroll and obtain loans from the school, or to take loans arranged through the school which have an excessive rate of interest and which lead to indebtedness that is excessive in relation to the potential earnings of a new program graduate.
6. Student recruitment practices permit student's exercise of free choice of programs.
7. Costs to the student are reasonable, accurately stated and published.
8. Policies and processes for student withdrawal and refunds on tuition and fees are fair, and published and made known to all applicants; there is neither high pressure selling nor refusal to refund unexpended tuition or fees to which the student is entitled.
9. Health and safety of students, faculty and patients are adequately safeguarded. Rapid City Regional Hospital's Clinical Laboratory Science educational program is an equal opportunity program. Any question of discrimination on the basis of age, sex, gender, marital status, pregnancy, race, color, religion, creed, national origin, genetic information, veterans status, or disability, except those disabilities which may affect bonafide professional performance or academic standards shall be directed to:

**Rapid City Regional Hospital  
353 Fairmont Boulevard  
Rapid City, SD 57701**

**National Accrediting Agency for  
Clinical Laboratory Sciences  
5600 North River Road  
Suite 720  
Rosemont, Illinois 60018  
773-714-8880**

# *Appendix C*

## *Faculty*

### **PROGRAM OFFICIALS**

Susan L. Eliason, MD  
Medical Director

Pam Kieffer, MS, CLS (NCA), MT(ASCP)  
Program Director

### **PATHOLOGISTS**

Susan Eliason, MD  
Clinical Laboratory Science Program Medical Director

Donald Habbe, MD  
Forensic Pathologist

Kim Goble, MD  
Flow Specialist

James Frost, MD

Victoria Herr, MD

Jeff Schleusener, MD  
Laboratory Medical Director

### **TECHNICAL STAFF**

Margorie Wilson, BS (Biol), MT (ASCP)  
Laboratory Manager

Steven Culp, BS CLS (NCA), MT (ASCP)  
Assistant Laboratory Director

Janet Uhl, BS, MT (ASCP)  
POC Coordinator

Carol McMasters, BS, MT (ASCP)  
LIS Supervisor

Jodi Kor, BS, MT (ASCP)  
Chemistry Section Head

Michell Lombardino, BS, MT (ASCP)  
Chemistry Senior Tech

Jen Tranas, MS, BS, CLS(NCA), MT(ASCP)  
Serology Senior Tech

Tyron White, BS, MT (ASCP)  
Microbiology Section Head

Jill Kelly, BS, MT (ASCP)  
Microbiology Senior Tech

Jody Thompson, BS, MT (ASCP)  
Blood Bank Section Head

Karen Twohy, BS, MT (ASCP)  
Blood Bank Senior Tech

Wendall Kallas, H (NCA), MT (HHT)  
Hematology Section Head

Drew Lewis, BS, MT (ASCP)  
Hematology Senior Tech

Garret Despiegler, BS, MT (ASCP)  
Flow Cytometry Senior Tech

Ken Sherman, BS, MT (ASCP)  
Evening Shift Supervisor

Erin Pfeiffer, BS, MT (ASCP)  
Evening Shift Senior Tech

Lynn Enochson, BS, MT (ASCP)  
Night Shift Supervisor

Autumn Hensley, BS, MT (ASCP)  
Clinical Lab of the Black Hills

Sharon Hasvold, BS  
Virology Supervisor

## *Appendix D*

### *Updating Coursework*

Persons who have not taken an organic or biochemistry course applicable toward that prerequisite within the past seven years or who have not taken a microbiology or immunology course applicable toward the prerequisite in the past seven years must update their knowledge in these fields BEFORE admission into a hospital-based clinical laboratory science program. NAACLS no longer performs the evaluations, but does provide guidelines for updating course work. These guidelines are listed below.

- 1) An appropriate refresher course in biochemistry (or organic chemistry), microbiology, or immunology may be taken. Or refresher courses may be taken in all areas if out of date. The courses must be acceptable toward a major in chemistry, biology, microbiology, or clinical laboratory science. If not, they must be certified by the college or university as equivalent. A grade of "C" or better must be achieved in each course.
- 2) College credit may be obtained in biochemistry (or organic chemistry), microbiology, or immunology by challenge examinations, if such challenge examinations are available from the academic institution. If a grade is given, it must be at least a "C". This arrangement must be made between the individual and the college or university.
- 3) If the potential applicant has recently been working in the chemical or microbiological fields or related areas, this experience may exempt you from one or all of the update prerequisites. Please send a resume of your relevant work experience to the COMTE Coordinator\* for evaluation by COMTE Program Officials. Include dates of employment, employer and specific duties performed for each position.

The current evaluation fee for this additional service is \$12. Please tell the COMTE Coordinator what type of evaluation you desire, for example...."Evaluate for updating coursework."

**DO NOT SEND CASH OR CHECK, SEND A POSTAL MONEY ORDER. All fees are non-refundable.**

\*COMTE Coordinator position rotates. Contact the following individual for information:

**Pam Kieffer, MS, CLS (NCA), MT(ASCP)  
Program Director, CLS Program  
Laboratory, Rapid City Regional Hospital  
353 Fairmont Blvd • Rapid City, SD 57701  
605-719-8092**

## ***Guidelines for the Applicant with a Foreign Degree***

Foreign applicants who are considering application to a clinical (hospital-based) program and feel that they meet NAACLS' minimum prerequisites and degree requirements must submit their transcript(s) to a qualified evaluation agency that performs foreign transcript evaluations.

The foreign applicant must satisfy at least one of the following criteria:

- 1) Possession of a foreign baccalaureate degree with a major in either chemistry or biology. Course work should meet the requirements specified above and should be subject to review and evaluation by a qualified evaluation agency.
- 2) Possession of a foreign baccalaureate degree in either general studies or in a professional area with a minimum of 80 academic semester hours or equivalent which are exclusive of any practical clinical components, including 16 semester hours or equivalent each in chemistry and biology. The course work should meet the requirements above and should be subject to review and evaluation by a qualified evaluation agency.
- 3) Admission to an accredited graduate program in a U.S. college or university should also be acceptable when the college/university has accepted the foreign degree, regardless of the declared major. The course work should meet the requirements above and should be subject to review and evaluation by that college/university or other qualified evaluation agency.

A list of qualified agencies that review foreign transcripts may be found below. Interested applicants should contact one of the agencies, submit official copies of all transcripts, and include the agency's required evaluation fee in the form of a US POSTAL MONEY ORDER.

**DO NOT SEND CASH. FEES ARE USUALLY NON-REFUNDABLE.**

## ***Evaluation Agencies for Foreign Transcript Evaluations***

### **Educational Credential Evaluators, Inc.**

PO Box 51407  
Milwaukee, WI 53203-3470  
414-289-3400  
www.ece.org

### **World Education Services, Inc.**

PO Box 745  
Attn: John Lembo, Manager of Academic Services  
Old Chelsea Station  
New York, NY 10113  
1-800-937-3895 ext. 330  
www.wes.org

# *Appendix E*

## *Academic Standards/Regulations*

The Clinical Laboratory Science Program recognizes that the adherence to certain academic standards, rules, and regulations are key to the fulfillment of attributes required for career entry clinical laboratory scientists. Misconduct and/or infractions as listed below would constitute academic cause for probation, suspension, and/or dismissal from the program.

### **A. Subject to Dismissal:**

1. Falsifying records related to admission to program.
2. Willfully falsifying hospital records, grade or attendance records or other program records.
3. Dishonesty, such as, cheating on an examination, plagiarism, or knowingly furnishing false information to the hospital.
4. Violence against instructor, patient or institution.
5. Theft.
6. Refusing to obey legitimate orders of program officials or hospital authorities.
7. Failure to accept rotation assignments.
8. Excessive absenteeism and/or being absent from scheduled class/clinical rotation without notice.
9. Unauthorized entry or use of hospital facilities.
10. Divulging confidential hospital/patient information to unauthorized persons.
11. Carrying a weapon, liquor or unauthorized controlled substances on hospital premises.
12. Reporting for scheduled training under the influence of alcohol or a non-authorized controlled substance.
13. Obtaining material, other property, or money from the hospital by fraudulent means or misrepresentation.
14. Violating any federal, state or local statute affecting the hospital or your student status with the Clinical Laboratory Science Program.

### **B. Subject to Suspension or Dismissal**

1. Not following directives or procedures of program, laboratory or hospital policies.
2. Tampering with unauthorized uses of, or wanton neglect in the care of, personal possessions of others, hospital facilities or equipment.
3. Abusive language to fellow students, hospital staff, patient or hospital visitors.
4. Leaving assigned area during scheduled hours without permission of program director or teaching technologist.
5. Failure to change or improve behavior after verbal or written warnings.
6. Sleeping, loafing during scheduled hours.

### **C. Subject to Verbal and/or Written Warning, Probation and Dismissal**

1. Performance of substandard work according to pass-fail criteria or behavioral evaluation.
2. Failure to comply with safety rules.
3. Excessive tardiness, absenteeism.
4. Failure to report all personal training-related injuries or patient incidents immediately.
5. Failure in observing quality assurance, safety and environmental services regulations.

# *Appendix F*

## **Rapid City Regional Hospital Clinical Laboratory Science Program**

Tuition and Fees for 45-week program\*

Payable at registration:

**Tuition and books . . . . . \$4,000**

\*The current tuition rate is \$4,000 per year. A non-refundable tuition deposit (\$300) must accompany a letter of acceptance. This fee is applied to (deduced from) the tuition.

This includes approximately \$500 for books.

Between 32-40 semester credit hours is transferrable to the affiliated college or university. This tuition represents approximately \$100 per semester hour credit.\*

If the university/college requires formal enrollment and assessment of first payment of tuition and fees for the clinical year of professional study, Rapid City Regional Hospital's Clinical Laboratory Science Program shall be reimbursed with an agreed upon portion of such tuition and fees.

The accepted student shall be responsible for any fees assessed by the Hospital above and beyond those reimbursed by the university/college.

### **Other Expenses: (Estimates)**

Uniforms and shoes . . . . .	\$ 200
Food . . . . .	\$1,800
Housing - shared apartment . . . . .	\$3,600
Housing - private apartment . . . . .	\$4,800
Miscellaneous supplies . . . . .	\$ 100
Health Insurance . . . . .	\$ 500
Hepatitis Vaccine . . . . .	\$ 100

\*Subject to annual review and/or adjustment.

# Appendix G

## What can you do with your degree? *CLINICAL LABORATORY SCIENCE GRADUATE*

### ***Clinical Analysis***

- Chemistry
- Therapeutic Drug Monitoring
- Drug Testing
- Hematology
- Microbiology
- Immunohematology
- Cytology
- Histotechnology
- Biogenetics
- Veterinary Science

### ***Health Care Administration***

- Laboratory Director
- Hospital Administrator
- Laboratory Consultant
- Hospital Infection Control
- Health Promotion
- Biometry
- Risk Management

### ***Research Science***

- Immune Systems
- Virology
- Oncology
- Cell Marker Technology
- Bioengineering
- Endocrinology
- Nuclear Medicine

### ***Higher Education***

- Educator
- Clinical Instructor
- Academic Administrator
- Allied Health Dean
- Program Director

### ***Public Health***

- Health Radiation Science
- Crime Laboratory Science
- Epidemiology
- Community Health Administration
- Environmental Health
- Peace Corps
- Project Hope
- Red Cross
- Medical Examiner Investigation

### ***Industry***

- Marketing
- Pharmaceuticals
- Occupational Health
- Biomedical Technology R&D
- Quality Assurance Management
- Installation Design
- Cosmetics Development
- Environmental Health
- Foods
- Medical Writing / Illustration
- Insurance Claims Analysis

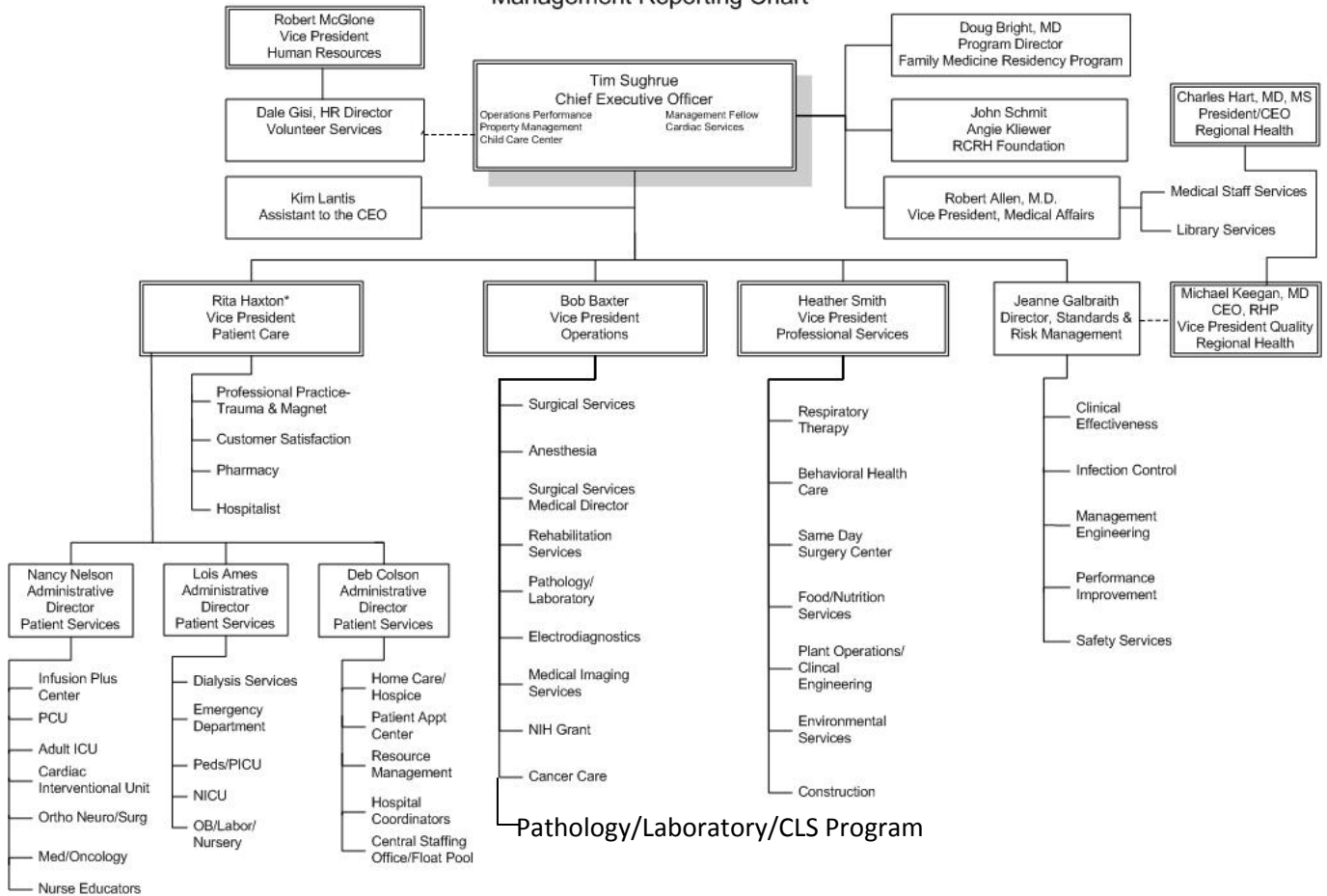
### ***Other Possibilities***

- Health Law
- Medicine
- Dentistry
- Veterinary Science
- Public Administration
- Legislative or Regulatory Office
- Public Policy Development

# Appendix H

## Rapid City Regional Hospital

### Management Reporting Chart



\*Rita Haxton serves as the Chief Nurse Executive