

HEALTH
PROFESSIONS
COUNCIL

RECOMMENDATIONS
ON THE DESIGNATION OF
MEDICAL LABORATORY
TECHNOLOGY

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Application by the
BC Society of Laboratory Science

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FOREWORD

This report is in response to an application by the BC Society of Laboratory Science¹ for designation as a self-regulating profession under the *Health Professions Act* (RSBC 1996, c. 183). Under the *Health Professions Act*, the Health Professions Council is a six-person advisory body appointed by the Government of British Columbia to make recommendations to the Minister of Health and Minister Responsible for Seniors about the regulation of health professions. This report is the result of an investigation of the profession of medical laboratory technology by a three-member panel of the Health Professions Council.

¹In March 1999, the BC Society of Medical Technologists (the applicant) formally changed its name under the *Society Act* to the BC Society of Laboratory Science. This report refers to members of the BC Society of Laboratory Science as "medical laboratory technologists" or "MLTechs."

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EXECUTIVE SUMMARY

In its review of the application for designation of medical laboratory technology (MLT), the Health Professions Council (the Council) applied the Public Interest Criteria as directed by the *Health Professions Act* (the *HPA*). The Council reviewed the information provided by the applicant and information gathered during the research, written consultation and public hearing phases of its investigation.

The Council first determined that the practice of MLT meets the definition of "*health profession*" set out in the *HPA*.

The Council then reviewed the services provided by medical laboratory technologists (MLTechs). After examining the services performed, and the technologies and procedures utilized, the Council concluded that the practice of MLT meets the basic risk of harm criteria which must be satisfied in order to designate a health profession under the *HPA*.

The Council next considered the supporting criteria listed in s.5(2) of the *Health Professions Act Health Professions Regulation* (the *HPA Regulation*). The Council found that there is a public interest in ensuring the availability of regulated services provided by MLTechs and that those services provide a benefit to the health and well-being of the public. The Council noted the integral nature of MLT to the medical diagnostic process and examined the education and body of knowledge which form the basis of MLT practice. The Council was advised that there are currently two educational institutions in British Columbia which are able to provide programs in MLT. The Council's review of the foregoing criteria lead it to conclude that it is in the public interest to designate the profession of MLT as a health profession under the *HPA*.

The Council finally considered whether any of the activities or services provided by MLTechs are activities which present a significant risk of harm such that those activities are encompassed within the Council's reserved act list (Appendix A). The Council recommended that "*procedures below the dermis, specifically for insertion of capillary puncture instruments and venipuncture needles, for purposes of laboratory specimen collection*" be a reserved act for MLTechs.

The Council also examined the key supporting role which MLT plays in diagnosis, reserved act #1 of the Council's list of reserved acts, to determine whether the quality assurance aspect of medical laboratory testing should constitute a new reserved act. The Council concluded that quality control is an essential part of laboratory testing; however, it does not pose a risk of harm to the public, in and of itself. Nor was quality control shown to be properly included as part of reserved act #1. Thus, quality control does not constitute a separate reserved act for MLTechs.

The Council also considered whether medical laboratory technology assistants (MLTAs) should become members of the College of Medical Laboratory Technologists, as a separate class of registrants.

The Council made the following recommendations to the Minister of Health and Minister Responsible for Seniors:

1. that medical laboratory technology be designated as a health profession under the *Health Professions Act*.
2. that the services which may be performed by medical laboratory technologists are the practice of medical laboratory technology, as defined in the following scope of practice statement:

Medical laboratory technology is the collection and handling of laboratory specimens, analysis of specimens, and interpretation of quality control data to verify the accuracy and precision of test results for use by other health care practitioners in diagnosis, treatment and prevention of disease.

3. that the reserved act recommended for members of the College is:

Performing procedures below the dermis, specifically insertion of capillary puncture instruments and venipuncture needles, for purposes of laboratory specimen collection.

4. that the college established for the health profession be named the "College of Medical Laboratory Technologists."
5. that medical laboratory technology assistants should become members of the College of Medical Laboratory Technologists as a separate class of registrants.
6. that there be no exemption from college membership for medical laboratory technologists and medical laboratory technology assistants employed in the public sector.
7. that the titles "Medical Laboratory Technologist" and "Medical Laboratory Technology Assistant" be reserved for the exclusive use of registrants of the College of Medical Laboratory Technologists.

RECOMMENDATIONS ON THE DESIGNATION OF MEDICAL LABORATORY TECHNOLOGY

I. GENERAL BACKGROUND

In Canada, there are five provinces that recognize the practice of MLT as a regulated health profession. They are Alberta, Quebec, Saskatchewan, Ontario and New Brunswick. MLTechs have never been regulated in BC.

The inspection and accreditation of diagnostic laboratory facilities in BC is conducted by the Diagnostic Accreditation Program (DAP) which is administered by the College of Physicians and Surgeons of BC (CPSBC).

The applicant is incorporated under the *Society Act* (RSBC 1996, c.433). Since 1969, the applicant has been the only provincial organization to represent MLTechs. Membership is voluntary. Employers of MLTechs, with rare exception, require certification and membership in the national professional association, the Canadian Society for Medical Laboratory Science (CSMLS). Therefore, most MLTechs have chosen to be members of the national body, whose BC membership more accurately reflects the total number of MLTechs in the province. Thus, the size of the BC Society of Laboratory Science (BCSLS) membership is not an accurate determinate of the number of MLTechs eligible for registration in a college. *ROLLCALL 97*, which is a status report of selected health personnel in the province of BC and is published by the Centre for Health Services and Policy Research at the University of British Columbia, uses the CSMLS membership in BC, which is currently 2,853, as the data base for MLTechs.

The applicant submits that approximately 58 per cent of the 2,853 CSMLS members are members of BCSLS. In the past two years, since membership has become available to them, almost 60 per cent of the MLTAs, who number about 1,200, have joined the applicant BCSLS. The applicant's board of directors includes both MLTechs and MLTAs.

II. APPLICATION AND PROCESS OF INVESTIGATION

This investigation was undertaken because the BC Society of Laboratory Science (the applicant) submitted an application for designation of MLT as a self-regulating health profession under the *HPA*. This application was received on March 21, 1994. A revised application was received on March 7, 1996.

A notice of investigation was published in the British Columbia Gazette in July 1997.

The Council met with representatives of the applicant BCSLS on July 15, 1997.

The Council's investigation of MLT included an extensive consultation process with related professions and other interested agencies and parties. As well, the Council conducted research on the practice of MLT and its regulation in other jurisdictions.

The Council corresponded with a large number of organizations during the consultation phase of its investigation. A synopsis of positions taken by respondents to the consultation process is found in Appendix B.

The Council reviewed the education and training available in British Columbia for the practice of MLT and made a site visit to MDS Metro Laboratories (MDS Metro) in Burnaby and Royal Columbian Hospital medical laboratory in New Westminster on September 4, 1997. A subsequent visit was made to MDS Metro in September 1998.

A public hearing was held on September 23, 1998. The participants are listed in Appendix C.

III. STATEMENT OF ISSUES

In accordance with the requirements of the *HPA*, the Council considered three issues involving the regulation of MLT. In assessing the public interest in the regulation of this profession, the Council reviewed:

- (1) the extent to which the practice of MLT may involve a risk of physical, mental or emotional harm to the health, safety, or well-being of the public according to s.5(1) of the *HPA Regulation* under the *HPA*;
- (2) whether designation of a college of MLT would be in the public interest having regard to the criteria of sections 5(1) and 5(2) of the *HPA Regulation*, and
- (3) in the event a college of MLT is established:
 - a) whether members of the college perform any reserved acts as listed in the Council's *Shared Scope of Practice Model Working Paper* (the *Working Paper*);
 - b) whether any other acts or activities performed by members of the college present such a serious risk of harm that consideration must be given to establishing a new reserved act; and
 - c) whether MLTAs should become members of the college, as a separate class of registrants.

IV. RECOMMENDATIONS

The Council recommends to the Minister of Health and Minister Responsible for Seniors:

1. that medical laboratory technology be designated as a health profession under the *Health Professions Act*.
2. that the services which may be performed by medical laboratory technologists are the practice of medical laboratory technology, as defined in the following scope of practice statement:

Medical laboratory technology is the collection and handling of laboratory specimens, analysis of specimens, and interpretation of quality control data to verify the accuracy and precision of test results for use by other health care practitioners in diagnosis, treatment and prevention of disease.

3. that the reserved act recommended for members of the College is:

Performing procedures below the dermis, specifically insertion of capillary puncture instruments and venipuncture needles, for purposes of laboratory specimen collection.

4. that the college established for the health profession be named the "College of Medical Laboratory Technologists."
5. that medical laboratory technology assistants should become members of the College of Medical Laboratory Technologists as a separate class of registrants.
6. that there be no exemption from college membership for medical laboratory technologists and medical laboratory technology assistants employed in the public sector.
7. that the titles "Medical Laboratory Technologist" and "Medical Laboratory Technology Assistant" be reserved for the exclusive use of registrants of the College of Medical Laboratory Technologists.

V. RATIONALE FOR THE RECOMMENDATIONS

A. DESIGNATION, SCOPE OF PRACTICE AND RESERVED ACTS

In order to proceed under s.10 of the *HPA* to recommend the designation of MLT, the Council must determine (1) that the applicant's profession comes within the definition of "*health profession*" as set out in s.1 of the *HPA*; and (2) that designation is in the public interest, having regard to the factors set out in s.5 of the *HPA Regulation*.

1. Definition of "Health Profession":

The *HPA* s.1 defines a "*health profession*" as:

. . . a profession in which a person exercises skill or judgment or provides a service related to

(a) the preservation or improvement of the health of individuals, or

(b) the treatment or care of individuals who are injured, sick, disabled or infirm.

A review of the application indicates that MLTechs perform medical laboratory diagnostic testing procedures and maintain standards for quality control of diagnostic testing technology. This testing is a critical component of medical diagnosis. The Council recognizes the use of skill and judgment required of a MLTech in support of the diagnosis and treatment process for persons who are seeking either preventative health care or treatment of existing illness or infirmity. The MLTech is an integral part of the health care team and performs technological work in support of the diagnostic process. The Council concludes that the practice of MLT falls within the definition of "*health profession*" as set out in the *HPA*.

2. Public Interest Criteria

Section 5 of the *HPA Regulation* Part II Public Interest Criteria states:

5.(1) *For the purposes of s.10(1) of the Act, the Council must consider the extent to which the practice of a health profession may involve a risk of physical, mental or emotional harm to the health, safety or well being of the public, having regard to*

- (a) the services performed by practitioners of the health profession,*
- (b) the technology, including instruments and materials, used by practitioners,*
- (c) the invasiveness of the procedure or mode of treatment used by practitioners, and*
- (d) the degree to which the health profession is
 - (i) practised under the supervision of another person who is qualified to practise as a member of a different health profession, or*
 - (ii) practised in a currently regulated environment.**

(2) The Council may also consider the following criteria:

- (a) the extent to which the health profession has demonstrated that there is a public interest in ensuring the availability of regulated services provided by the health profession;*
- (b) the extent to which the services of the health profession provide a recognized and demonstrated benefit to the health, safety or well being of the public;*
- (c) the extent to which there exists a body of knowledge that forms the basis of the standards of practice of the health profession;*
- (d) whether members of the profession are awarded a certificate or degree from a recognized post-secondary educational institution;*
- (e) whether it is important that continuing competence of the practitioner be monitored;*
- (f) the extent to which there exists within the health profession recognized leadership which has expressed a commitment to regulate the profession in the public interest;*

- (g) *the likelihood that a college established under the Act would be capable of carrying out the duties imposed by the Act, having regard to factors which in the view of the council may affect the viable operation of the College;*
- (h) *whether designation of the health profession is likely to limit the availability of services contrary to the public interest.*

a) Introduction to the Application Process

Prior to analysis of the MLT application and the Public Interest Criteria, the Council will discuss general concepts relevant to reviewing an application for designation, including scope of practice statements, "*exclusive scope of practice*" and reserved acts.

The Public Interest Criteria contained in s. 5(1) of the *HPA Regulation* provide the context in which the Council will analyze the risk of harm in the applicants' practice. While the Council may also consider the s.5(2) criteria in making its designation decision, these criteria do not address risk of harm.

If the Council decides that the profession should be designated, the Council will determine an appropriate scope of practice statement for the profession. A scope of practice statement describes what the profession does, the methods it uses, and the purposes for which it does it. The statement itself does not grant the profession an "*exclusive scope of practice*." Nonetheless, the statement is important because it defines the area of practice in relation to which the governing body must establish registration requirements and standards of practice; it defines the parameters of the profession for members of the profession, employers, courts and educators; and it informs consumers about the services practitioners are qualified to perform.

The Council's 1994 Terms of Reference for the review of scopes of practice of regulated health professions direct the Council to define scopes of practice and to encourage shared scopes of practice among qualified health practitioners. These same principles apply to the Council's mandate to define scopes of practice for health professions for which designation is recommended. The term "*exclusive scope of practice*" is no longer used.

The Council will next determine which aspects of the scope of practice have been shown to present a significant risk of harm. These will be defined as reserved acts, as directed in s.10(3)(b)(v) of the *HPA* and the Council's Terms of Reference, and they may be shared with other regulated health professions. Any other aspects of the scope of practice of a health profession are considered to be capable of being shared with other health practitioners and the general public.

There is a distinction between analyzing risk of harm for the purposes of s.5(1) and for reserved acts. The s.5(1) analysis is broadly based and looks at the extent of the risk of physical, mental or emotional harm to the health, safety or well being of the public in the practice of the profession. This analysis looks generally at the services performed by practitioners, the technology used, the invasiveness of procedures or treatments and the degree of regulation or supervision of practitioners, as directed in s.5(1)(a), (b), (c) and (d). The Council will determine whether the profession should be designated on the basis of this analysis together with the analysis of the criteria contained in s.5(2) of the *HPA Regulation*.

After it is determined that the profession should be designated, a more narrowly focused risk of harm analysis is conducted to determine whether the health profession will be granted one or more reserved acts. The Council emphasizes that it is not necessary for a health profession to be granted any reserved acts in order to be designated. However, once the decision to designate is made, the Council will look at whether there are acts or activities within the profession's scope of practice which present such a significant risk of harm that they must be designated reserved acts, as directed in s.10(3)(b)(v) of the *HPA*. In the *Working Paper* issued by the Council in January 1998, reserved acts have been restricted primarily to physical acts which carry a significant risk of harm.

These distinctions between the two risk of harm analyses are valid and important; however, they are often misunderstood by applicants. Additionally, there is significant overlap between the two, particularly when discussing the services performed by practitioners, the technology utilized and invasiveness of procedures employed. In the following analysis of MLT practice, the Council looks generally at the services performed by MLTechs in order to analyze the risk of harm for purposes of designation, using the s.5(1) criteria. When discussing the areas of services performed, technologies employed or invasive procedures, the Council will discuss the general risk of harm for purposes of the s.5(1) analysis. In the Reserved Acts section of this report, the Council will

specifically address whether any acts or activities present the significant risk of harm required of a reserved act, as directed under s.10(3)(b)(v) of the *HPA* and the Council's Terms of Reference.

The Council's *Working Paper* will form the basis of the reserved act analysis. Where an act or activity is currently listed as a reserved act, the Council will determine whether members of the applicant profession are trained and qualified to perform such act. Where the applicant requests a reserved act which is not included on the current reserved act list incorporated in the *Working Paper*, the Council will conduct a risk of harm analysis to determine if a new reserved act is warranted or a current reserved act could be expanded or adapted to include that which is requested by the applicant, should it present a significant risk of harm.

b) Section 5(1): Risk of Harm Criteria

The risk of harm criteria are contained in s.5(1) of the *HPA Regulation*. In the following pages the Council analyzes and applies the 5.(1) risk of harm criteria with respect to the information provided by the applicant.

According to information provided by the applicant:

...technologists uncover the clues present in a patient's body fluids and tissues that allow physicians to understand and treat disease or illness. Technologists also specialize in evaluating the technical accuracy and reliability of test results in the practice of various quality control procedures. Quality control procedures are required to evaluate the technical accuracy and reliability of all test results. Without the use of quality control procedures, it is impossible to know whether any test result is accurate. Consequently, any practitioner who is performing any type of testing should be required to ensure that quality control procedures are performed.

The laboratory results produced by medical laboratory technologists are relied upon by physicians to:

- *Accurately diagnose disease and illness;*
- *Select the appropriate treatment for a patient;*

- *Monitor the effectiveness of the treatment; and*
- *Maintain the patient's health.*

The science of medical technology involves the performance of a large number of complex tests. Throughout the testing process, medical laboratory technologists use sophisticated technology to collect and handle laboratory specimens, analyze the specimens, interpret the quality control data to verify the accuracy and precision of the test results, and correlate the test results with the patient's clinical diagnosis and other test results. The calibration, monitoring and maintenance of the laboratory instruments is also primarily performed by the technologist . . . Some common examples of the tests done by medical laboratory technologists include:

- *Determining the blood type of a patient and assessing the compatibility of donor blood for transfusion;*
- *Detecting various anemias, leukemias and bleeding disorders;*
- *Identifying micro-organisms that cause infection and determining the appropriate antibiotics for treatment;*
- *Monitoring the patient's response to treatment; and*
- *Preparing and testing tissues for malignancies.*

(1) Section 5(1)(a): The services performed by practitioners of the health profession

The applicant submits:

Within the laboratory, the practice of medical laboratory technology focuses on six major functional areas: accessioning, clinical chemistry, haematology, anatomical pathology, immunohaematology, and microbiology. Each of these areas may exist as a separate section within a laboratory or may be combined depending on the size of the laboratory. Examples of some of the tests performed within each of these areas include:

Accessioning: Phlebotomy, acquisition, transport, and distribution of blood and other samples

<i>Anatomical Pathology:</i>	<i>Examination of tissues from surgery or autopsy for presence of disease or cause of death</i>
<i>Clinical Chemistry:</i>	<i>Testing of blood for glucose, cholesterol, triglycerides and HDL. Testing of urine for kidney function</i>
<i>Heamatology:</i>	<i>The examination of blood cells for evidence of anaemia or leukaemia. Evaluation of the clotting function of blood.</i>
<i>Immunohaematology:</i>	<i>Typing, matching and issuing of blood and blood products for transfusion</i>
<i>Microbiology:</i>	<i>Examinations of specimens for presence or cause of infection. Identification of the appropriate antibiotic to treat the infection</i>

Within these major areas of practice, subsections and specialties have evolved in response to the evolution of technology: eg. molecular genetics, virology, cytology, cytogenetics and immunology.

The applicant submits the following detailed list of services performed by MLTechs:

The technologist uses many skills to provide the following services:

1. PRE-ANALYTICAL

Direct Patient Contact

- *Procure blood samples by invasive venipuncture or capillary puncture in response to medical order*
- *Obtain other samples, such as fungal scrapings or swabs, in response to medical order*

- *Instruct patients in proper collection of specimens, such as urine, and in pre-test preparation (eg. diet or drug restrictions)*
- *Instruct patients in the use of home testing equipment*

Accessioning

- *Identification and accurate labelling of specimens*
- *Transport and processing of potentially hazardous biological materials*

2. ANALYTICAL

Testing

- *Calibrate, maintain, monitor, and operate laboratory equipment*
- *Prepare blood and blood products for transfusion*
- *Prepare blood and other specimens for testing*
- *Organize the daily workload according to testing priorities*
- *Perform laboratory tests and procedures*
- *Assume responsibility for approving and signing out test results directly to patient record*

Quality Assurance

- *Evaluate the technical accuracy and precision of test results*
- *Monitor quality control:*
 - *Run quality control specimens*
 - *Evaluate results against established means and standard deviations*

- *Identify technical and instrumental causes of problems*
- *Determine and implement solutions to problems based on analytical principles and knowledge of instrumentation: eg. examining interfering substances that may give false positive or negative results*
- *Identify possible physiological causes of unexpected test results in order to confirm their accuracy: eg. an abnormally high bilirubin may be explained by the condition of liver failure*

3. POST-ANALYTICAL

- *Report results in a timely manner to the patient record*
- *Release results directly to the patient with the physician's permission, but prior to the physician's review and interpretation of results*
- *Notify the physician of results that require immediate attention to ensure proper patient treatment: eg. prothrombin times*

The applicant also submitted information regarding the MLTechs management roles in the areas of safety, administration, and education in the clinical laboratory setting.

The applicant has submitted detailed examples of dangerous practices and potential risks of harm in the performance of laboratory services. Among those are:

Outside the Laboratory

- *Performance of diagnostic cholesterol testing by "non-laboratorians" of [a major grocery retailer] with inaccurate results, a lack of quality control procedures and a breach of safety standards*
- *"Live Blood Cell Analysis" advertisements describing how by observing a drop of blood under a microscope, bodily functions can be diagnosed*

Inside the Laboratory

- *An erroneous glucose meter reading led to complacency in the management of a diabetic with complications in the treatment of renal infection, ultimately resulting in death (Inquest into death of William Turpel, Ontario Coroner's Court, File No. 13738, December, 1987)*
- *Failure to carry out a crossmatch procedure on a patient's blood resulted in a transfusion reaction due to the wrong blood being administered which led to coma, loss of cardiac, renal and pulmonary function and then death (R. v. Lockyer, unreported criminal case, 1980)*
- *Erroneous labelling and handling of a blood sample led to an inaccurate laboratory report so that proposed parents did not know they carried the Tay-Sachs abnormality and elected to have a child, who was born with the disease and died before her third birthday (Naccash v. Burger (1982) 290 S.E. 825)*
- *Failure to communicate abnormal test results in a timely fashion resulted in failure to diagnose and admit a patient with diabetes who subsequently died of cardiac arrest (Neufville v. Sobers (1983) 18 A.C.W.S (2d) 407; see Picard, Legal Liability of Doctors and Hospitals in Canada, 2nd ed., p. 512)*
- *A mix-up in the laboratory resulted in a misdiagnosis of cancer with wrongful removal of fallopian tubes (Lefebvre v. Osborne (1983) 22 A.C.W.S. (2d) 350; see Picard, Legal Liability of Doctors and Hospitals in Canada, 2nd ed., p. 501)*
- *Injury and infection during invasive specimen collection*
- *Inaccurate test results resulting in unreliable or faulty diagnostic and treatment decisions with potentially fatal patient outcomes*
- *Failure to recognize and draw to the attention of the pathologist abnormal and unusual test results*
- *Erroneous data being reported due to cross-contamination of blood*
- *Lack of expertise in interpreting quality control which would allow the reporting of inaccurate test results*
- *Misreading results causing the patient to have allergic reactions to blood products*
- *Delay in reporting results*

- *Mishandling of biohazardous materials*
- *Inaccurate labelling of specimens causing results to be reported on the wrong patient*

Improper performance of MLT services can result in physical, emotional and mental harmful consequences such as: injury and infection during specimen collection; results being reported to the wrong patient record; or inaccurate test results that lead to unreliable diagnostic and treatment decisions which could result in fatal patient outcomes.

The applicant submits that with regard to the services performed by MLTechs, risk to the public may arise both from the clinical judgment of MLTechs in performing laboratory investigations and quality control procedures upon which a medical diagnosis is based and in the application of therapies based upon that diagnosis. This is especially true where the diagnostic test is the sole source of a definitive diagnosis, or relied upon for treatment, for example blood typing and cross-matching for transfusions. The harm resulting from inaccurate blood typing can be anaphylactic reaction or possibly death.

According to information provided by the applicant, MLT is often the sole laboratory basis for diagnosis in situations such as blood testing for genetic abnormalities or certain chronic conditions. It is used to determine treatment as varied as reproductive advice or dosage of insulin administered to a child diabetic. The risk of harm can be significant.

(2) Section 5(1)(b): The technology, including instruments and materials, used by practitioners

MLT as practiced in British Columbia includes the use of capillary puncture instruments and venous puncture needles, in conjunction with highly sophisticated laboratory analysis technology. Equipment used ranges from simple to highly sophisticated and includes:

- centrifuges;
- compound, phase contrast, darkfield, fluorescence, inverted, polarizing and stereoscopic microscopes;
- refractometers;
- light-measuring instruments;
- electrochemical measuring systems;
- miscellaneous measuring systems including coagulation instruments, osmometers and automated cell counters;
- automated systems such as chemical analyzers;
- mechanical aids such as automated staining machines, automatic dispensers and diluters, mixing devices and cell washers; and

- thermal equipment.

Other equipment is issued within specialty areas of practice.

Erroneous readings or interpretations of machine indications and lack of expertise in interpreting quality control could result in the reporting of inaccurate test results. It has been thoroughly demonstrated to the Council that proper use and maintenance of laboratory equipment and performance of periodic quality control procedures by MLTechs require training and education to protect the public from harm.

(3) Section 5(1)(c): The invasiveness of the procedure or mode of treatment used by practitioners

MLTechs use invasive procedures such as venipuncture or capillary blood sampling to collect specimens for testing. Improper or unsanitary collection or management of and disposal of collection material could result in infection to patients and/or lab staff, and contamination of test results.

Capillary and venous puncture is a physically invasive procedure and as such, carries a significant risk of harm.

(4) Section 5(1)(d): The degree to which the health profession is

(i) practised under the supervision of another person who is qualified to practise as a member of a different health profession

Most MLTechs practice in a medical diagnostic facility, a satellite facility or hospital laboratory. The facility is under the general administrative direction of a medical practitioner; however, the daily practice of MLTechs is independent and not directly supervised by other health professionals.

(ii) practised in a currently regulated environment

The Diagnostic Accreditation Program (DAP) of the CPSBC submitted the following in response to the applicant's submission:

The DAP was established in 1971 under the joint sponsorship of the College of Physicians & Surgeons of BC and the BC Medical Association. . . The Program is rooted in the philosophy of peer review and professional initiative to sustain and promote excellence in the field of laboratory medicine, and the following comments will relate to the practice of lab medicine only.

. . . Our organization accredits over 160 public and private clinical pathology labs, all of which are inspected on a routine, and rotating basis every five years. Between inspections, we mandate and monitor external proficiency programs to ensure maintenance of acceptable levels of performance.

Effective September 1994, the DAP is now officially a standing committee of the College of Physicians & Surgeons of BC, and reports directly to that organization. The Rules Made Under the Medical Practitioners Act recognize that laboratory

medicine is the practice of medicine. The "Rules" clearly state that a physician, whose credentials are acceptable to the DAP, shall be responsible for the operation and administration of a diagnostic facility. Further, the "Rules" state that no physician shall practice in a facility unless that facility holds full or provisional accreditation.

Medical laboratories then, are subject not only to medical directorship as specified in the College "Rules", but are also subject to accreditation by the DAP. This entails on-site inspections by teams of laboratory physicians and medical laboratory technologists approximately every five years. The inspection examines the physical facility, safety issues for staff and patients, procedures, instrumentation, reporting and all other details of laboratory practice. If enough serious deficiencies are noted, the laboratory may be granted "provisional" accreditation only, or in rare cases have their accreditation withdrawn . . .

In summary, subject to the above reservations, the DAP supports this application.

In response to the comments of the DAP, the applicant submits:

The role of the Diagnostic Accreditation Program is to supervise and monitor the operation of the clinical laboratory. The role of the College will be to monitor the competency of the laboratory worker (MLAs and MLTs).

It is important to note that the protection of the public is not sufficiently ensured by simply establishing a process of accreditation of laboratory facilities. The practice of medical laboratory technology performed in the laboratory must also be regulated. There is no effective regulatory mechanism in British Columbia to ensure and maintain the competent performance of medical laboratory technology services.

The Council notes that the DAP, in its oral presentation at the public hearing on September 23, 1998, acknowledged that historically certain medical laboratory functions have been assigned to MLTechs who were educated and trained to perform them. The MLTech then performs those functions independently without supervision. While the functions were originally delegated to MLTechs from laboratory physicians, MLT practice has developed to a level of independent practice in collaboration with laboratory physicians. The CPSBC regulates medical practitioners; it is proposed that a separate college regulate MLTechs.

The Council first considered whether MLTechs practise in a regulated environment. The DAP accredits laboratory facilities and evaluates protocols and procedures which are administered by medical practitioners in accredited facilities. The Council accepts that the DAP, through its evaluation of protocols, provides some procedural uniformity; however, the individual health professionals who practice independently within that structure are not specifically regulated by that process. DAP requirements do not address the professional practice of MLTechs. There is no legislation in BC which sets out standardized requirements for entry to practice for MLTechs. Employers are not obliged to hire only MLTechs who are members of the BCSLS. Therefore, in the Council's view, there are no mandatory workplace or credentialing processes which function to regulate MLT professional practice.

The Council next considered whether supervision within the employment relationship provided adequate or sufficient protection to the public from impaired, unethical or incompetent practice by MLTechs.

The vast majority of MLTechs are employees. Employment sanctions for substandard professional performance were mentioned generally in the *Gove Inquiry into Child Protection in British Columbia*, at volume 2, page 102:

Neither employers nor an employee's union can properly regulate the practice of professionals. Because the ministry is an employer and not a self-governing profession, it might not vigorously pursue discipline against an employee, for fear of being held liable for inadequately supervising the employee, or for not having provided adequate training or resources for the employee to properly do his or her job. If an employee is a member of a bargaining unit, the union will try to ensure good working conditions and protect employee rights and entitlements. Its responsibility is to protect its membership and it should not be expected to regulate its members' practice in order to protect the public. Logistically and ethically, no employer or union is able to be employer, bargaining agent and professional regulator. Professionals must be regulated by an independent professional regulatory body.

At the public hearing, Sheila Woodcock, Registrar of the College of Medical Laboratory Technologists of Ontario, commented on this issue. Since medical laboratory technologists became one of 21 regulated health professions under the *Regulated Health Professions Act (RHPA)* of Ontario, she stated that the majority of complaints made to the Ontario College have resulted from s.85.5 of the *RHPA*. This section requires an employer who terminates or disciplines an employee who is a member of a regulated health profession for reasons of professional misconduct, incompetence or incapacity to report this action within 30 days to the applicable regulatory body. This reporting requirement also applies to an employee who leaves employment to avoid employer disciplinary action. Ms. Woodcock added that even in situations where an employee may be reinstated as a result of union action, the regulatory body continues its investigation and disciplinary process to completion.

The Council has received no evidence in its investigation that supervision within employment relationships of MLTechs contain sufficient protection from incompetent, unethical or impaired practice. An employer may discipline or terminate an employee on the basis of ethical issues, standards of practice or any other issue that would properly be the subject of disciplinary action if that employee were a member of a professional regulatory body. However, in the absence of such a regulatory body, the employee is free to practice MLT with another employer.

In the Council's view, the employment relationship of MLTechs does not provide a sufficient regulatory environment to protect the public interest.

The fact that reports are being made to the Ontario College under section 85.5 of the *RHPA*, in the Council's view, supports the need for a regulatory body for MLT in BC to deal with issues of this nature.

(5) Section 5(1) Conclusion

The Council has analyzed the practice of MLT and found there is a general risk of harm involved in the services which meets the section 5(1) criteria for designation. In coming to its conclusion, the Council was influenced by the utilization of capillary and venous puncture which is an invasive procedure, as well as the integral part medical laboratory technology plays in diagnosis.

MLTechs practice independently, unsupervised by other health care professionals. The Council finds the practice of MLT meets the s.5(1) risk of harm criteria for designation as a health profession under the *HPA*.

c) Section 5(2): Other Criteria

When examining the services of the health profession being considered for designation under the *HPA* the Council must consider the s.5(1) criteria above. The Council may also consider the s.5(2) criteria. While consideration of the s.5(2) criteria is not mandatory, the practice of the Council has been to consider all of the s. 5(1) and (2) criteria.

(1) s.5(2)(a): The extent to which the health profession has demonstrated that there is a public interest in ensuring the availability of regulated services provided by the health profession

The applicant submits that:

Regulated medical laboratory services would ensure, among other things, that occurrences of harmful incompetent practice do not remain undetected because of the current absence of an effective regulatory body. The regulatory body would address the harm and pursue complaints from the public, employers and other professions with enforceable results, and enforce mandatory common standards of practice in all employment settings.

It is clear to the Council that medical diagnostic services have become increasingly dependent upon technology and the medical laboratory technologists who monitor, maintain and utilize this technology. Five provinces currently regulate MLTechs. In British Columbia no regulatory body or other health practitioner directly supervises the performance of MLTechs. Regulation of MLT services would afford a process whereby complaints could be pursued, disciplinary action could be taken, and standards of practice could be enforced.

The Council concludes that the applicant has demonstrated there is a public interest in ensuring the availability of regulated MLT services.

(2) s.5(2)(b): The extent to which the services of the health profession provide a recognized and demonstrated benefit to the health, safety or well being of the public

MLT is the third largest health profession in BC. Only the CPSBC and the RNABC have more members. Medical practitioners rely on MLT services in making reliable diagnostic and treatment decisions. The Council accepts that MLTechs have long been recognized members of the health care team and their work benefits the health, safety and well being of the public.

(3) s.5(2)(c): The extent to which there exists a body of knowledge that forms the basis of the standards of practice of the health profession

The body of knowledge that forms the basis of the standards of practice of MLT is represented in the syllabus for certification of the Canadian Society of Medical Laboratory Science (CSMLS) and the curricula of the educational programs at BC Institute of Technology (BCIT) and the University of British Columbia (UBC).

(4) s.5(2)(d): Whether members of the profession are awarded a certificate or degree from a recognized post-secondary educational institution

There are two educational institutions providing MLT training in British Columbia. Graduates receive either a college diploma from BCIT or a bachelor's degree from UBC. Graduates of UBC must complete a clinical practicum and additional courses before they can obtain CSMLS certification and work in a medical laboratory. The BCIT program is under revision and plans to re-open in 1999.

(5) s.5(2)(e): Whether it is important that continuing competence of the practitioner be monitored

In the Council's view, monitoring continuing competence is important in the practice of any profession which involves a risk of harm to the health, safety or well-being of the public. Medical laboratory science and technology is constantly changing and expanding its services and procedures through the introduction of new devices and standards of practice; therefore monitoring continued competence is important. As the technology becomes more sophisticated and the practice of MLTechs becomes more independent and highly specialized in the use of this advanced technology, it is important for the public to be assured of a minimum standard of competence.

(6) s.5(2)(f): The extent to which there exists within the health profession recognized leadership which has expressed a commitment to regulate the profession in the public interest

Since 1969 the applicant has been the only BC organization to represent MLTechs in the province. Although membership is voluntary, 58 per cent of MLTechs in the province who are registered with the CSMLS are also members of the BCCLS. Almost 60 per cent of MLTAs are also members of the applicant.

BCSLS has an elected board of directors composed of representatives of MLTechs and MLTAs from across the province. The board meets regularly to deal with issues that include the promotion of continuing and advanced education. Applicant members adhere to a code of professional conduct which was developed by the CSMLS in 1949, and which requires them, among other things, to endeavour to maintain and improve their skills and knowledge and keep current with scientific advances. In cooperation with the CSMLS, the applicant conducts a voluntary competency assurance program. The applicant, together with the CSMLS has an extensive continuing education program. Many of these programs are accredited by the CSMLS for the purpose of competency assurance and advanced certification.

(7) s.5(2)(g): The likelihood that a college established under the Act would be capable of carrying out the duties imposed by the Act, having regard to factors which in the view of the council may affect the viable operation of the college

The applicant submits that the registration fees received from approximately 2,853 MLTechs and 1,200 MLTAs in BC, should they become members of the College, would provide the financial means to operate the College. The viability of a College is not dependent on MLTAs membership.

A proposed budget for the College's first year of operation has been provided to the Council.

(8) s.5(2)(h): Whether designation of the health profession is likely to limit the availability of services contrary to the public interest

There is no evidence that designation of the profession of MLT under the *HPA* would limit the availability of MLT services. Although there is no requirement to do so, employers generally expect CSMLS certification before employing a MLTech. As a result, the Council believes most MLTechs who are currently employed would meet registration requirements of a college, which are likely to be similar to those of the CSMLS.

(9) Section 5(2) Conclusion

Analysis of the s.5(2) criteria supports the designation of MLT under the *HPA*. The Council was particularly influenced by the commitment of the leadership to regulate in the public interest, the benefit that MLT services provide to the health and well-being of the public, and the size of the applicant organization which increases the likelihood that a college will be viable. The Council finds that it is in the public interest to recommend designation of the profession of MLT as a health profession under the *HPA*.

In addition, the Council was influenced by the general support for designation which was evident during the consultation process. The British Columbia Medical Association, the CPSBC, the Canadian Society for Medical Laboratory Science, the Saskatchewan Society of Medical Laboratory Technologists Inc., the Manitoba Society of Medical Laboratory Technologists, the BC Society of Respiratory Therapists,

the Order Professionnel des Technologistes Médicaux Du Québec, the College of Pharmacists of BC and the Alberta Society of Medical Laboratory Technologists all expressed support for designation. In their submissions, the British Columbia Nurses Union and the British Columbia Government and Service Employees Union opposed designation on the grounds that issues of scope of practice are addressed through the collective bargaining process.

Therefore, the Council recommends that medical laboratory technology be designated as a health profession under the *Health Professions Act*.

Once the Council has concluded that designation of a profession will be recommended, it then considers the scope of practice statement, practice limits, reserved acts, if any, and reserved titles for members of the proposed college.

B. SCOPE OF PRACTICE STATEMENT

The applicant proposed the following scope of practice statement:

Medical laboratory technology is the performance of laboratory investigations on the human body and on specimens taken from the human body and requires the evaluation of the technical accuracy and reliability of the test results, and the correlation of test data for clinical patient diagnosis, for the purpose of supporting the diagnosis, treatment and prevention of disease by other health care practitioners.

Based upon the application of BCSLs and information provided by respondents during the consultation process and at the public hearing, the Council has determined that the following scope of practice statement most accurately reflects current MLT practice. This wording comes from the rationale submitted by the applicant for the proposed scope statement. The Council finds that this wording encompasses the entire range of activities performed by MLTechs and MLTAs. It provides a broad description of all of the activities and reflects what the profession does, the methods used and the purpose for which the profession performs its function.

Therefore, the Council recommends that the services which may be performed by medical laboratory technologists are the practice of medical laboratory technology, as defined in the following scope of practice statement:

Medical laboratory technology is the collection and handling of laboratory specimens, analysis of specimens, and interpretation of quality control data to verify the accuracy and precision of test results for use by other health care practitioners in diagnosis, treatment and prevention of disease.

C. PRACTICE LIMITS

The applicant submitted the following with regard to MLTechs scope of practice limits:

Services that should not be provided by medical laboratory technologists are:

- *Giving medical advice or diagnostic interpretation of test results to patients*
- *Invasive procedures other than capillary or venous punctures*

Medical laboratory technologists are capable of performing their routine duties according to established protocols, guidelines, and standards without direct supervision.

The DAP submitted the following with regard to MLTechs practice limits:

The DAP agrees with the limits regarding interpretation and invasive procedures. The statement regarding routine duties is unnecessary as these duties are routinely delegated by laboratory directors in accredited facilities. Laboratory directors are responsible for having appropriate protocols, guidelines and standards in place.

Although the applicant proposed practice limits, as suggested under *HPA* section 10(3)(b)(iv), and the DAP agrees with them, the Council considers that the reserved acts system as outlined in the *Working Paper* provides sufficient guarantees that only members of health professions which have been granted reserved acts will be allowed to perform or supervise those acts in the provision of health care services. In the Council's view, practice limits are redundant in the case of MLTechs.

D. RESERVED ACTS

The rationale underlying the granting of reserved acts is to protect the public by limiting provision of those acts which present a significant risk of harm to members of specific professions who are qualified to perform them. The Council has developed a list of reserved acts (Appendix B) which is set out in its *Working Paper*. The *Working Paper* was developed, in large part, as a result of the Council's review of information provided by the various professions during the scope of practice consultation process.

The Council wishes to emphasize that its recommendations will likely provide for the sharing of many of the reserved acts. Thus, in conducting its review of any of the reserved acts of a profession, the Council is not necessarily deciding which acts would be reserved exclusively to that profession. It is possible and indeed likely that acts reserved to a profession will also be reserved to other professions. However, each profession may perform the reserved acts granted to it only within the context of its defined scope of practice.

1. Procedures below the dermis

The risk of harm associated with the use of needles below the dermis was thoroughly discussed in the Council's 1993 *Report on*

the Designation of Acupuncture (the Acupuncture Report). At this time, the Council sees no need to elaborate on that discussion and concurs with the conclusions made in the *Acupuncture Report*. In that report, at page 18, the Council said, "[t]he insertion of needles below the dermis causes a risk of harm of infection and hemorrhage and the transmission of certain diseases. There is also a risk of puncturing an internal organ."

In January 1998, the Council issued the *Working Paper* in which the following reserved act #2(a) is listed:

procedures on tissue below the dermis, below the surface of a mucous membrane, in or below the surface of the cornea, in or below the surfaces of the teeth, including the scaling of teeth.

The Council recognizes that the applicant did not have the benefit of the Council's *Working Paper* when its original application for designation was submitted to the Council in 1994. However, it is clear from the applicant's submission that its members perform procedures included in reserved act #2(a) and that the applicant is requesting MLTechs be granted this act.

Therefore, the Council recommends that members of the College of Medical Laboratory Technologists be granted the following reserved act:

Performing procedures below the dermis, specifically insertion of capillary puncture instruments and venipuncture needles, for purposes of laboratory specimen collection.

2. Proposed Reserved Act for Quality Control Procedures and Interpretation

In its submission, the applicant proposes that:

the quality control of specimen testing, the evaluation of quality control results and corrective measures to address the causes of inaccurate test results be a reserved act for medical laboratory technologists and other health practitioners competent to perform it.

The Council has carefully considered the question of whether quality control procedures should become reserved acts for members of the BCSLS and others. The Council recognizes that these procedures are appropriately within the scope of practice of MLTechs and others.

The Council first considered whether quality control procedures should constitute a new reserved act. In the Council's view, the performance of quality control procedures by MLTechs does not pose a significant risk of harm to the patient in and of itself. Quality control procedures are not performed directly on patients, unlike procedures conducted directly on the patient's body or those which involve prescribing, compounding, administering or dispensing a product or substance which the patient will utilize directly. The Council has concluded, therefore, that quality control procedures do not constitute a separate reserved act.

The Council then considered whether quality control procedures were procedures which are already implicitly included in one of the reserved acts described in the Council's *Working Paper*. The Council recognizes that, at the time of the initial application, the applicant had not had benefit of the Council's *Working Paper* in which the Council lists the following as reserved act #1:

Making a diagnosis identifying a disease, disorder or condition as the cause of signs or symptoms of the

individual.

The process of diagnosis frequently requires the use of a number of diagnostic tools, including the results of laboratory testing. Quality control is an essential part of laboratory testing. The applicant submits, and was supported by testimony from DAP of the CPSBC, among others, that, without quality control, laboratory data can be erroneously reported, creating the risk of misdiagnosis. However, it is the responsibility of the diagnostician to consider all of the information available from and about the patient, including the results of laboratory testing, and assess the reliability of the test results in light of all the other information available in order to make a diagnosis. Significant risk of harm to the patient arises from the diagnostic process as a whole and not from failure of quality control procedures. The examples given by the applicant did not demonstrate harm caused by an isolated failure of quality control procedures. Rather, the examples illustrate situations where numerous other factors contributed to the harm, including human error and other errors in the laboratory. In these situations, the public will be protected from harm by designation of MLTechs as a self-regulating profession. The Council concludes that quality control procedures are not properly included as part of the Reserved Act #1.

In its submission, the applicant raised a concern about quality control in point-of-care testing. The Council notes that as technology becomes more accessible, patients are increasingly able to self-monitor using point-of-care testing. Creating a reserved act for quality control will not eliminate point-of-care testing or the need for patients to consult their health care providers for diagnosis and treatment. The accuracy of test results generated outside diagnostic laboratory facilities must be assessed by the practitioner in the ongoing management of the patient's treatment process.

E. OTHER ISSUES

1. College Membership for Medical Laboratory Technology Assistants

The *HPA* s.10(3)(b)(v) instructs the Council to make recommendations regarding services that shall only be performed by registrants or performed by or under the supervision of registrants. In many employment settings in British Columbia, the reserved act which has been recommended for MLTechs is almost exclusively performed by MLTAs with some degree of supervision by MLTechs. The *HPA* s.19(1)(h) and 19(2) contemplates a college making provisions for registration of separate classes of registrants.

As part of their application, the BCSLS has requested that MLTAs become members of the College. The applicant estimates there are 1,200 MLTAs working in the province.

MLTAs are primarily responsible for procurement and accessioning of specimens. MLTAs are often the only persons in direct contact with the patient during the specimen collection process. In the course of collecting blood samples, MLTAs perform capillary and venous puncture, which is a reserved act. The diagnostic and analytic validity of laboratory testing is entirely dependent upon the integrity of the specimen collection and handling processes performed by MLTAs. In most cases, MLTAs are not directly supervised in hospitals, private medical laboratories or the satellite offices of private medical laboratories which are their primary places of employment.

Until recently, MLTAs in British Columbia have not been represented by a professional association. In 1995, BCSLS offered MLTAs membership in their society. From 1995 through 1997, the BCSLS offered membership and certification to currently employed MLTAs. Certification was based upon work experience and/or a certification examination. Since 1998, BCSLS has certified only those MLTAs who have completed a BC community college program or its equivalent. To date, approximately 690 (almost 60 per cent) of MLTAs working in British Columbia have joined the applicant BCSLS. BCSLS has made efforts to encourage the other 550 MLTAs to join by placing notices in employment settings.

Historically, MLTAs were trained on the job by MLTechs, medical practitioners or nurses to perform venous and capillary puncture and to correctly handle and transport the specimens to the laboratory. Vancouver Community College, University College of the Cariboo, Camosun College and West Coast College of Health Care now offer six month education programs for MLTAs. Once formal training is successfully completed, the MLTA candidate is eligible to write the certification examination prepared by BCSLS if they wish to become certified. Certification is not a requirement for employment as a MLTA.

In considering the request by BCSLS that MLTAs become members of their college, the Council recognizes that there is a public interest in safe and effective venous and capillary puncture. Both carry a serious risk of harm and are a reserved act. Their proper performance directly affects another reserved act, diagnosis. If MLTAs do not become members of the College, they will not be permitted to perform venous and capillary puncture unless they are granted an exemption by the government from the prohibition against a unregulated health professional performing a reserved act, or they are supervised under the guidelines set out in the *Working Paper* by members of a regulated health profession who have been granted this reserved act.

In the latter case, the Council believes that, in most settings, MLTechs would be the practitioners required to supervise MLTA performance of venous and capillary puncture. This requirement would be potentially troublesome and onerous for MLTechs. Like MLTAs, in most employment settings, MLTechs are employees who do not have control over hiring their assistants, nor the ability to stipulate the conditions under which they supervise those assistants.

The Council notes that, in Ontario, MLTAs are not members of the College but are licensed under the *Laboratory and Specimen Collection Centre Licensing Act*. At the public hearing, the Registrar of the College of Medical Laboratory Technologists of Ontario, Sheila Woodcock, indicated there have been problems with this system when complaints about an MLTA are received because the College has no jurisdiction over MLTAs. The Ontario College is planning to revisit this issue during its five year review with the Health Professions Regulatory Advisory Council.

The Council concludes that it is in the public interest that MLTAs become members of the College of MLT, should it be designated. In reaching this conclusion, the Council is particularly persuaded by the fact MLTAs perform the reserved act of venous and capillary puncture many times daily. This reserved act is performed on virtually every member of the population numerous times throughout their lives. A patient rarely has a choice of which practitioner draws a sample for a blood test, and often has little choice whether the test is performed.

The Council sees several advantages to MLTA membership in a college of medical laboratory technologists. Regulation of MLTAs would impose the requirements of registration, continuing education, and a complaints and disciplinary process that is unrelated to the workplace. It would enhance MLTech and MLTA coordination of standards of practice.

The Council was also influenced by the fact that there was general support for MLTA membership evidenced in the responses to the consultation process. The BC Society of Clinical Perfusionists, Manitoba Society of Medical Laboratory Technologists, the CSMLS, the Clinical Laboratory Management Association, the College of Medical Laboratory Technologists of Ontario and the Alberta Society of Medical Laboratory Technologists all support inclusion of MLTAs in a college. The British Columbia Nurses Union does not support inclusion of MLTAs in a college.

Notwithstanding the foregoing recommendation, the Council wishes to make the following cautionary comments. The Council is

concerned that in the case of MLTAs, college membership could be burdensome, particularly financially. MLTAs are not generally highly paid employees. It would be important to provide careful consideration to setting college fees commensurate with salary levels, with MLTAs paying lower fees than the more highly paid MLTechs. MLTA membership in a college as a separate category of registrants would require a more complex administrative structure to ensure that MLTAs are represented at all levels. These areas include disciplinary procedures, standards of practice protocols, competency monitoring, and bylaws which address specific duties which may be delegated to MLTAs.

The Council is also concerned that it has not heard directly from any of the over 40 per cent of MLTAs working in British Columbia who are not currently members of BCSLS. The Council cannot be certain that MLTAs who are not members of BCSLS are aware of the application and the implications of College membership. If membership in the College is implemented for MLTAs, it would be important that a grandparenting provision be allowed for the approximately 550 MLTAs who are not currently members of the applicant BCSLS, should they not meet certification criteria. If grandparenting provisions were not made, the availability to the public of the services of MLTAs might be negatively affected.

The Council notes that had MLTAs applied independently for designation under the *HPA*, they might not have met the definition of a health profession or the section 5(2) Public Interest Criteria, in particular s.5(2)(c) and (f) which address body of knowledge and recognized independent leadership. However this situation is not without precedent. The creation of a separate class of registrants, as in the inclusion of Certified Dental Assistants as registrants in the College of Dental Surgeons, allows the public to address complaints to a regulatory body which is capable of dealing with both MLTechs and MLTAs.

After careful study of the submissions and the testimony at the public hearing, it is the Council's conclusion that inclusion of MLTAs in a college governing MLTechs is in the public interest.

Therefore, the Council recommends that medical laboratory technology assistants should become members of the College of Medical Laboratory Technologists as a separate class of registrants.

2. Public Employees Exemption from Membership in a College

According to information provided by the applicant, 50 per cent of MLTechs and MLTAs are employed in the public sector. It has come to the attention of the Council that some public sector employees are exempt from membership in a regulatory body. However, the Council has not been presented with any evidence that an exemption from college membership of MLTechs and MLTAs employed in the public sector would be in the public interest.

Therefore, the Council recommends that there be no exemption from college membership for medical laboratory technologists and medical laboratory technology assistants employed in the public sector.

F. NAME OF THE COLLEGE

Consistent with the regulatory bodies for other health professions, the Council recommends that the college name incorporate the name of the practitioners rather than the profession. This name was requested by the applicant and the Council agrees it is appropriate.

Therefore, the Council recommends that the college established for the health profession be named the "College of Medical Laboratory

Technologists".

G. RESERVED TITLES

Consistent with the rationale of the recommendation on the name of the college, the Council recommends reserving the titles "Medical Laboratory Technologist" and "Medical Laboratory Technology Assistant" exclusively for registrants of the college.

The concept of "reserved title" is intended to protect the public by enabling members of the public to identify those practitioners who are trained and qualified in all aspects of the scope of MLT practice, even those aspects which do not represent reserved acts. Only those practitioners who meet the standards and have the credentials to be members of the college may use the titles reserved for members of that college.

Because there is currently some confusion among members of the public about the role of the MLTA, the Council recommends that a title be reserved for them.

Therefore, the Council recommends that the titles "Medical Laboratory Technologist" and "Medical Laboratory Technology Assistant" be reserved for the exclusive use of registrants of the College of Medical Laboratory Technologists.

RESERVED ACTS LIST

1. Making a diagnosis identifying a disease, disorder or condition as the cause of signs or symptoms of the individual.
2. Performing the following physically invasive or physically manipulative acts:
 - (a) procedures on tissue below the dermis, below the surface of a mucous membrane, in or below the surface of the cornea, in or below the surfaces of the teeth, including the scaling of teeth;
 - (b) setting or casting a fracture of a bone or reducing a dislocation of a joint;
 - (c) movement of the joints of the spine beyond the limits the body can voluntarily achieve but within the anatomical range of motion using a high velocity, low amplitude thrust;
 - (d) administering a substance by injection or inhalation;
 - (e) putting an instrument, hand or finger(s),
 - i. beyond the external ear canal,
 - ii. beyond the point in the nasal passages, where they normally narrow,
 - iii. beyond the pharynx,
 - iv. beyond the opening of the urethra,
 - v. beyond the labia majora,
 - vi. beyond the anal verge, or
 - vii. into an artificial opening into the body.
3. Managing labour or delivery of a baby.

4. Applying or ordering the application of a hazardous form of energy including diagnostic ultrasound, electricity, magnetic resonance imaging, lithotripsy, laser and X-ray.
5. Prescribing, compounding, dispensing or administering by any means a drug listed in Schedule I or II of the *Pharmacists, Pharmacy Operations and Drug Scheduling Act*.

For the purposes of this reserved act, the following definitions shall apply:

"prescribing": the ordering of a drug.

"compounding": mixing ingredients, at least one of which is a drug.

"dispensing": preparing or filling a prescription for drugs.

6. Prescribing appliances or devices for vision, hearing or dental conditions; dispensing such prescribed appliances or devices for dental conditions; fitting such appliances or devices for dental conditions, or fitting contact lenses.
7. Allergy challenge testing in which a positive result of the test is a significant allergic response; or allergy desensitizing treatment in which there is a risk of significant allergic response.

SUMMARY OF RESPONSES TO
MEDICAL LABORATORY TECHNOLOGY APPLICATION

2. Canadian Society for Medical Laboratory Science

2 page letter from Miss E. Valerie Booth, Executive Director

Scope of practice: Supports this portion. Its only concern is that "specimen procurement" was not specifically addressed in the scope of practice. Scope of practice must also reflect the scope of training and professional competency of technologists who may train as generalists or in specialty areas.

Reserved acts and supervision of shared reserved act: Supports these sections as presented.

Supervised acts for general technology services: Has a concern with "*performing electrocardiograms*" in this section as it is not mentioned in the scope of practice and is not part of medical laboratory technology (MLT) training.

Reserved titles: Supports the first two but has a concern with the third title, "Medical Technologist (MT)", which it finds not specific enough and could be used for other health care technologists.

Registration of medical laboratory technology assistants (MLTAs) and proposed practice limits: Supports the inclusion of MLTAs in the college and supports the practice limits as presented.

3. Saskatchewan Society of Medical Laboratory Technologists Inc.

5 page letter from Laurel A. Ayerst, MLT, ART, Executive Director

Scope of practice: Fully supports this portion and would like to add "*the practice of MLT includes practice in the areas of laboratory administration, education and research.*"

Reserved acts: Supports the proposal for quality control of specimen testing.

Supervision of shared reserved act: Supports the BCSLS proposal for the supervision of quality control performance.

Supervised acts for general technology services: Agrees that MLTechs are responsible for on-site training and direct supervision of MLTAs. Only MLTechs with suitable training in ECG techniques should train and supervise MLTAs performing electrocardiograms. Regarding "direct supervision", it proposes the following definition:

"Direct supervision" entails telling the supervised person what to do and how to do it. The supervisor continuously monitors performance and is always readily accessible in case of difficulty or needed intervention. Direct supervision need not, however, mean constant observation, although a supervisor should use constant observation until a judgment about competence is made.

Reserved titles: Believes that the suggested titles are adequate.

Registration of medical laboratory technology assistants (MLTAs): Feels it is appropriate that MLTAs be required to be members of the college.

Proposed practice limits: Supports the limits as proposed. Some specialized areas of testing require specialized training, i.e., cytology, cytogenetics, etc. Suggests that the word "routine" be removed from the statement as MLTechs are equally capable of performing non-routine duties.

4. Manitoba Society of Medical Laboratory Technologists

4 page letter from Adrian N.C. Delatt, ART, CAE, President

Scope of practice: Agrees with the major points of the scope of practice definition, i.e., expertise of MLTechs in assessing test results, monitoring practices and calibrating instruments.

Reserved acts: Agrees with this section and adds that "home testing" by patients themselves and testing within doctors offices by non-laboratory staff should also be included.

Supervision of shared reserved act and acts for general technology services: Fully agrees with both sections.

Reserved titles: Points out common confusion between "technicians" and "technologists". Suggests the title "Medical Laboratory Scientist".

Registration of medical laboratory technology assistants (MLTAs): Finds that the term "Medical Laboratory Assistant" is inconsistent. In Manitoba, it is "a multi-skilled X-ray technologist". It believes that MLTAs should be regulated if they perform analyses leading to a reportable result.

Proposed practice limits: Restrictions listed should be performed by physicians or nurse practitioners. It should be physicians who determine which tests should be ordered and when.

5. **BC Society of Clinical Perfusion**

2 page letter from Dustin L. Spratt, BSc.,CPC, CCP, President

Scope of practice: Feels that the scope of practice is clear and appropriate.

Reserved acts: Wants an amendment to include an exemption for perfusionists, as follows:

...and perfusionists for the limited purpose of performing, analyzing, and correcting blood gases (including hematocrits), blood chemistry, and coagulation assays during the conduct of extracorporeal circulation, mechanical cardiac assist, and/or during the use of other perfusion related equipment.

Supervision of shared reserved acts: Again, it offers the amendment to include perfusionists, as follows:

...or a perfusionist for the limited purpose of performing quality control procedures on blood gas, blood chemistry, and/or coagulation analysis equipment used for the purpose extracorporeal circulation, mechanical cardiac assist, and/or the perfusionism related procedures.

Supervised acts for general technology services: Makes no comment on this portion.

Reserved titles: Feels the titles adequately reflect the distinctions.

Registration of medical laboratory technology assistants: Feels it would be a positive step to include MLTAs in the college.

Proposed practice limits: Feels the practice limits are appropriate.

6. **Clinical Laboratory Management Association (BC Children's Hospital)**

2 page letter from Andy Basi, Vice President

Scope of practice: Suggests the following amendment: "...for the purpose of supporting the diagnosis, *monitoring, treatment and prevention of diseases...*". The only limitation should be that responsibility for quality control programs lies with laboratory technologists even when tests may be performed by the practitioners.

Reserved acts: Feels this portion is appropriate.

Supervision of shared reserved acts: Wants to replace the word "direct" with general", e.g., "...unless under the *general supervision...*".

Supervised acts for general technology services: Feels there is not sufficient risk of harm. Believes that in many cases MLTAs may be even more knowledgeable than MLTechs, for example, in performing electrocardiograms. MLTAs may need **general** supervision, but not necessarily **direct** supervision and not necessarily by MLTechs.

Reserved titles: Has a concern with the abbreviation "M.T.", since this is used for "Medical Technicians" in Ontario and in parts of the USA.

Registration of medical laboratory technology assistants: Feels there is insufficient risk of harm to require MLTAs to join the college.

Proposed practice limits: Makes no specific comment on this portion.

7. **BC Government and Service Employees' Union**

2 page letter from John F. Brewin, Staff Representative, Advocacy Department

Responds in general terms - that the issues of scope and limitation are addressed through the collective bargaining process and that it is aware that the BC SLS proposes functions that overlap with that of other professions.

8. **British Columbia Medical Association**²

1 page letter and attachment from Mark D. Schonfeld, B.Sc., M.D., Asst. Director

²Submission #8 by the BC Medical Association (BCMA) is identical with submission #30 by the BC Association of Laboratory Physicians (BCALP) since the BCALP is part of the BCMA.

Is in principle supportive of the application, but expresses some concerns. Claims that laboratory practice in BC is regulated by the Diagnostic Accreditation Program (DAP), contrary to applicant's claim that the practice is unregulated.

Scope of practice: Explains that clinical interpretation of laboratory test results are performed by physicians as assisted by laboratory physicians (pathologists). Argues that MLTechs have limited skills for this function.

Reserved acts: MLTechs work under the supervision of pathologists. The latter set definite criteria for test requests and/or test results which are to be reviewed by one of the supervising pathologists. Believes that the proposed reserved acts reflect the status quo in organized laboratories accredited by the DAP. Does not believe there is sufficient risk of harm to warrant the restriction and adds that there is ample evidence of the existence of an excellent quality control program in laboratories regulated by the DAP.

Supervision of shared reserved acts: Presents similar observation as for reserved acts, above.

Registration of medical laboratory technology assistants: Sees no reason to include MLTAs in the college as MLTAs work in large laboratories under the direct supervision of registered medical technologists.

Proposed practice limits: Is in agreement with this portion.

9. British Columbia Society of Respiratory Therapists

3 page letter from Michael Coutts, President

Is supportive of the MLT position but expresses a general concern for the wording of the reserved act.

Scope of practice: Agrees with the need for quality control procedures when conducting tests but understands this to mean that **anyone** can perform the quality control, and not only the person who performs the test. Also expresses concern regarding quality assurance performance if MLTechs propose any exclusivity to it.

Reserved acts: Feels the term "arterial blood gas analysis" limits its practice. It feels that this term limits involvement of respiratory therapists in quality control evaluation of arterial blood measurements other than "blood gas" measurements. Also, the term excludes it from performing "mixed venous blood analysis" quality control evaluation which respiratory therapists currently perform at point of care settings and satellite settings. Proposes to include "mixed venous blood analysis" to the statements regarding respiratory therapists, and proposes a less limiting term, "arterial blood analysis".

10. College of Physicians & Surgeons of BC

1 page letter and attachment from Dr. T.F. Handley, M.B.,Ch.B., Registrar

See submission #33 of the Diagnostic Accreditation Program, at page 18.

11. Registered Nurses Association of BC

1 page letter from Pat Cutshall, RN, Executive Director

Has no specific comments except that some RNs perform what may be considered to be "laboratory investigations" as envisioned in the scope of practice definition.

12. College of Dental Surgeons of BC³

1 page letter from G.R. Thordarson, D.M.D., Executive Director

It fails to see the advantage of the designation of medical laboratory technology as a self-governing profession, as it is not aware of any difficulty that has arisen due to the current structure. It feels that further fragmentation of medicine will serve no additional purpose and may have implications regarding public quality assurance.

Scope of practice: It is apprehensive to include the phrase "*correlation of test data to patient clinical diagnosis, for the purpose of supporting the diagnosis, treatment and prevention of diseases.*" The definition includes the requirement of an understanding of the patient's status, and clinical medicine, in order to assist in the diagnosis which, in the Executive Director's opinion, is beyond the scope of the current training for laboratory technologists.

13. Order Professionnel des Technologistes Médicaux Du Québec⁴

3 page letter from Alain Collette, avocat, Adm.A.

Scope of practice: Recommends that the term "laboratory investigation" be more precise to avoid ambiguity. It is in accord with the statement that expertise on the validation of quality control procedures lies with MLTechs.

³Views expressed here are personal to Dr. Thordarson, Executive Director. His views were not reviewed by the College Council as of the letter's date.

⁴Submission is in French. Translation may not be complete and/or accurate.

Reserved acts: Agrees with this portion.

Supervision of shared reserved acts and supervised acts for general technology services: Agrees that the supervision lies with the MLTechs to assure that corrective measures, when needed, are available.

Reserved titles: Believes that the most appropriate title is "Medical Technologist". The term "Medical Laboratory Technologist" may appear to restrict MLTechs to laboratory expertise which, in the era of downsizing, information age and interdisciplinary practice, may be less accurate.

Registration of medical laboratory technology assistants: There are no MLTAs in Quebec. More information on their role is required for Quebec to form a position.

Proposed practice limits: Is in agreement with this portion. MLTechs do not possess the expertise and sufficient knowledge to make diagnostic interpretations or to form medical opinions.⁵

14. New Brunswick Society of Medical Laboratory Technologists (NBSMLT)

3 page letter from Janet L. Kingston, Executive Director

Scope of practice: Finds this portion appropriate as it is similar to the scope of practice of NBSMLT. MLTechs are not responsible for diagnosis of patient conditions, but aid physicians by providing them with information required for patient diagnosis.

Reserved acts: Finds this portion appropriate. The restriction is absolutely necessary as untrained individuals may not understand the importance of proper quality control procedures.

Supervision of shared reserved acts and supervised acts for general technology services: Agrees with these two portions.

Reserved titles: Agrees in toto with this portion.

Registration of medical laboratory technology assistants: Does not have an opinion. MLTAs in NB are not included under the its Act as NB employs very few MLTAs, but the work of MLTAs is **always** supervised by MLTechs.

⁵Attached with Quebec's submission is the "Regulation respecting the acts contemplated in section 31 of the Medical Act which may be done by classes of persons other than physicians".

Proposed practice limits: Disagrees with the restriction on diagnostic interpretation of test results to patients as it feels this is too restrictive in a point of care testing situation. It also feels that "invasive procedures" should be more clearly defined. In NB, MLTechs sometimes collect arterial blood. If the same procedure is performed by MLTechs in BC under the supervision of a physician then the proposed limit is acceptable.

15. College of Medical Laboratory Technologists of Ontario⁶

3 page letter from Sheila M. Woodcock, Registrar and Executive Director

The College reserves the right to make an oral presentation in the future.

Scope of practice: A similar scope of practice exists in Ontario under the *Medical Laboratory Technology Act*. It proposes the following scope of practice definition in order to fulfil the intention described of encompassing any one performing any type of testing:

Medical laboratory technology is the performance of laboratory investigations on the human body and on specimens taken from the human body; and requires the evaluation of technical accuracy and reliability of test results, and correlation of test data to (delete "patient") clinical diagnosis, for the purpose of (delete "supporting the") diagnosis, treatment and prevention of diseases (delete "by other health care practitioners").

It suggests that the only limitations are those that exist prior to the implementation of legislation. For example, some practitioners have qualifications that limit their practice to a single area or discipline in the laboratory. Ontario MLTechs are registered to practise in one or more laboratory specialties. Because of the ensuing administrative complexity it is advised that registration be to practise in a broad context, with only the limitations specified, where required.

Reserved acts: Restricting quality control testing is strongly supported and the proposed exemptions are appropriate.

Supervision of shared reserved acts: Finds this problematic and would require revision to clarify the intent and to avoid problems in implementation. Supervision, if included, should be limited to those with the required knowledge.

⁶Submission #15 is identical to submission #24 at page 14.

Supervised acts for general technology services: Finds that the inclusion of electrocardiograms has no point of reference. MLTechs must be aware that supervision entails accountability. The extension to point of care settings is idealistic, but may not be practical. If quality control is a reserved act, limited to certain authorized professions, there should be sufficient protection for the public.

Reserved titles: Believes that all three titles are appropriate. Suggests the inclusion of the phrase, "*or any other title that suggests the person may be qualified as a medical laboratory technologist.*"

Registration of medical laboratory technology assistants: Thinks that this may be appropriate. Membership of MLTAs in the MLT College in Ontario is currently being considered.

Proposed practice limits: Finds this section well worded.

16. **College of Pharmacists of BC**

3 page letter from Linda J. Lytle, B.Sc.(Phr.), R.Ph., Registrar

Supports the efforts of the BCSLS to become a self-regulating profession under the *Health Professions Act*.

Scope of practice: Recognizes the need for technical reliability and accuracy of the results of tests being performed and supports the need for a broad application of the proposed scope of practice.

Reserved acts: Objects to the exclusion of pharmacists from the list of practitioners proposed for shared reserved act status. It requests the inclusion of pharmacists in the list as it believes that pharmacists, if given access to proper quality control procedures training, can ably perform the required assessments to ensure the technical accuracy and reliability of test results.

Supervision of shared reserved acts: Argues that pharmacists should also be permitted to directly supervise pharmacy technicians or other individuals performing quality control procedures.

Supervised acts for general technology services: Has no comment on this portion.

Reserved titles: Finds that proposed reserved titles are useful in distinguishing MLTechs from others performing similar services.

Registration of medical laboratory technology assistants: Wishes to draw an analogy of registration of MLTAs under the MLT college with its past unsuccessful efforts to include pharmacy technicians under the *Pharmacy, Pharmacy Operations and Drug Scheduling Act*.

Proposed practice limits: Makes no comment on this portion.

17. **BCIT**

2 page letter from Karen Nicolson, Program Head

Scope of practice, reserved acts and supervision: Emphasizes the imperative for quality control procedures, particularly with the proliferation of point of care testing.

Proposed practice limits: Finds this appropriate and points out that MLTechs are competent to correlate laboratory test results with a given diagnosis to ensure that the results are meaningful in light of the diagnosis, treatment or prevention program.

18. **Province of BC - Ministry of Education, Skills and Training**

1 page letter from Thelma Brown, Project Officer

Makes no specific comments and defers to experts and stakeholders on this matter.

19. **Alberta Health**

1 page letter from Jack Davis, Deputy Minister

Has no opinion. Gives an update on the Alberta situation where MLTechs were designated in July 1992 under the *Health Disciplines Act*. It is planned that MLTechs will be included in the proposed *Health Professions Act* that is currently being drafted.

20. **Ontario Ministry of Health**

2 page letter from Alan R. Burrows, Director

Scope of practice: Section 3 of the *Medical Laboratory Technology Act (MLTA)* states:

The practice of medical laboratory technology is the performance of laboratory investigations on the human body or on specimens taken from the human body and the evaluation of the technical sufficiency of the investigations and their results.

Reserved acts: Section 4 of the *MLTA* states:

In the course of engaging in the practice of medical laboratory technology, a member is authorized, subject to the terms, conditions and limitations imposed on his or her certificate of registration to take blood samples from veins or by skin pricking.

Section 5(1) states:

A member shall not perform a procedure under the authority of section 4 unless the procedure is ordered by a member of the College of Physicians and Surgeons of Ontario or the Royal College of Dental Surgeons of Ontario.

Plans are underway to amend this provision to give midwives and nurse practitioners authority to order procedures performed by MLTechs.

Reserved titles: Section 9 of the *MLTA* states:

(1) no person other than a member shall use the title "medical laboratory technologist", a variation or abbreviation or an equivalent in another language.

(2) no person other than a member shall hold himself or herself out as a person who is qualified to practise in Ontario as a medical laboratory technologist or in a specialty of medical laboratory technology.

(3) in this section, "abbreviation" includes an abbreviation of a variation.

There are no plans to amend the scope of practice and protected (reserved) titles of MLTechs in Ontario

21. Office des professions du Québec⁷

3 page letter and attachment from Robert Diamant, President

In Quebec, MLTechs possess reserved titles without reserved acts. Since this province is currently undergoing major changes to its health system, it decides not to make any comment on this matter.

⁷Submission is in French. Translation may not be complete and/or accurate.

22. Northwest Territories Health and Social Services

1 page letter and attachment from Lynn Elkin, Director, Policy, Planning and Evaluation

NWT do not have any legislation or regulations governing either the regulation or self-regulation of MLTechs. Brian Yeo makes his submission as follows:

Scope of practice: Questions the need for the terms "...performance of laboratory investigations *on the human body*..." The intent to require the performance of strict quality control procedures may restrict others from performing medical laboratory testing. Finds it impractical that all testings will be done by MLTechs.

Reserved acts: If the reserved act refers to specific acts there is unnecessary overlap. Respiratory therapists, physicians and nurses may be allowed to perform the "act" of, for example, "collecting a blood sample from an artery".

Supervision of shared reserved acts: Feels that the description in this portion is a "responsibility or a task", not an "act". If blood gas sample collection from an artery, and the performance of testing on the sample are the responsibility of the Respiratory Therapy Department then they are responsible for the performance of quality control. The MLT could act as a consultant in quality control. Quality control must be done by the person performing the procedures. MLTechs can supervise but not directly in the case of out of laboratory testing.

Supervised acts for general technology services: Again, he is concerned about the "act" v. "task/responsibility" procedure. Procuring specimens and performing electrocardiograms are possibly "acts", while accessioning samples is a "task" or "responsibility". MLTechs should be responsible for on-site training anywhere in the hospital and out of the hospital, and for training and direct supervision of laboratory assistants for many procedures.

He also feels that few MLTechs have the qualification to train anyone to perform electrocardiograms.

Reserved titles: "Medical Laboratory Technologist" implies laboratory functions; "Registered Medical Laboratory Technologist" implies the existence of a registrar/register; and "Certified Medical Technologist" may indicate some level of proficiency, but in itself, the title would not necessarily prevent those without certification from delivering laboratory services. Has no comment on "Medical Technologist".

Registration of medical laboratory technology assistants: MLTAs may need their own legislation because of the possibility that if MLTechs attain self-regulation this may convert MLTA duties to MLT duties.

Proposed practice limits: Agrees in toto with this portion.

23. Saskatchewan Health

2 page letter and attachment from Drew Johnston, Senior Health Professions Analyst

Makes no comment on the application. Gives a synopsis of the Saskatchewan situation. MLTechs in Saskatchewan were given self-governing status in 1995 under the *Medical Laboratory Technology Act*. Only title protection was legislated upon, leaving open the scope of practice and reserved acts for MLTechs. The need for regulation of MLTAs was not demonstrated. Finally, the issue of increasing credentials from a diploma to a degree for MLT was not supported by Saskatchewan Health.

24. College of Medical laboratory Technologists of Ontario

3 page letter from Sheila M. Woodcock, Registrar and Executive Director

See identical submission #15 at page 8.

25. College of Physical Therapists of BC

1 page letter from Beth Maloney, Registrar

Scope of practice: Finds the terms "*laboratory investigation on the human body*" very broad as physical therapists may be involved in performing tests on clients in a "laboratory setting".

Finds the second paragraph of the scope of practice statement inappropriate. The College of Laboratory Technologists, if formed, could not impose practice standards on other regulated health professions.

26. New Brunswick Health and Community Services

3 page letter from Jean Guy Finn, Deputy Minister

Scope of practice: The definition is representative of the work and responsibilities of medical laboratory professionals. Finds the term "any practitioner" appropriate.

Reserved acts: Emphasizes the importance of quality control and quality assurance.

Supervised acts for general technology services: Believes that the expertise in testing, quality control and instrumentation lies with the MLTechs whose background and training affords them this expertise. Questions whether supervision is sufficient to protect the public.

Reserved titles: Finds the three reserved titles adequate to serve the public.

Registration of medical laboratory technology assistants: Presumes that if MLTechs supervise MLTAs in the work setting, the former are also responsible for the latter's scope of practice.

Proposed practice limits: Finds the limits appropriate.

27. **Ontario Society of Medical Technologists**

3 page letter from Blanca McArthur, Executive Director

Scope of practice: Concurs with this portion, but finds the term "*other health care practitioners*" ambiguous and suggests the term "*primary health care practitioners*" instead. It also prefers to replace the term "*any practitioner who is*" with the term "*all registered medical laboratory technologists who are*".

Reserved acts: Finds this portion very appropriate.

Supervision of shared reserved acts and supervised acts for general technology services: Supports these two portions.

Reserved titles: Opines that only one reserved title should be recognized. It prefers the title "Registered Medical Laboratory Technologist" as it indicates that the professional is registered with a regulatory body.

Registration of medical laboratory technology assistants: Reserves its opinion on this matter.

Proposed practice limits: Finds the limits appropriate and proposes to include in item two "*arterial samples from I.V.'s or heplocks*".

28. **Alberta Society of Medical Laboratory Technologists**

3 page letter from Jennifer Sherwood, Executive Director/Registrar

Scope of practice: Finds the proposed scope of practice somewhat limiting as it is not broad enough to be inclusive of all people who qualify to be registered MLTechs. In Alberta, there are MLTechs who are not involved with human tissues but work as sales representatives, instructors, veterinary and medical research technologists, etc.

Reserved acts: Finds the wording somewhat unclear, particularly the following statement: "...under the direct supervision of a medical laboratory technologist, pathologist, research scientist, clinical chemist, clinical microbiologist or other persons with the requisite graduate level training...". Argues that this statement suggests that MLTechs require graduate level training and believes there is no such intent. Suggests appropriate rewording to reflect the true intent. Also questions the inclusion of "radiation technologists" to share in the reserved acts in the performance of radio-immuno assays, since these activities are routinely performed by MLTechs in Alberta. It firmly supports the issue on quality control evaluation.

Supervised acts for general technology services: Agrees on the issue of MLTA supervision by MLTechs but questions whether the supervision must be **direct**. Recommends that the criteria for certifying MLTAs be set out by the BCCLS so that the MLTs supervising MLTAs know the basic minimum level of competence.

Reserved titles: Disagrees with the titles "Medical technologist (MT)" and "Registered Technologist (RT)". Both titles are too vague to inform the public about the service, medical or otherwise, that the technologists provide.

Registration of medical laboratory technology assistants: Supports the inclusion of MLTAs within the MLT college.

Proposed practice limits: Believes the limits to be somewhat restricting and may hinder MLTechs from working to the full extent of their scope of practice. It notes that in Alberta, some MLTechs are cross-trained in X-ray. Believes the statement, "*giving medical advice or diagnostic interpretation of test results to patients*" is vague and questions whether this limit should be in the legislation. "Medical diagnosis" is not included in the proposed restricted activities in Alberta. Suggests to put this limit in either the regulations or in the workplace policy.

29. **Alberta Labour**⁸

2 page letter from Sheryl Prescott Paterson, Acting Director, Health Disciplines

Submits a general response as the questions apply in Alberta. MLTechs in Alberta are regulated under the *Health Disciplines Act*. The Alberta Society of Medical Technologists (ASMLT) is the governing body and membership is not mandatory. Alberta is in the process of developing new legislation, the proposed *Health Professions Act*.

⁸This submission is identical with submission #31 at page 18.

Reserved acts: Currently, there is no restricted activity under the proposed list of restricted activities.⁹

Reserved titles: Under the *Medical Laboratory Technologists Regulation of the Health Disciplines Act*, the following titles are reserved for members of the ASMLT:

"Medical Laboratory Technologist";
"Registered Medical Laboratory Technologist"; and
"M.L.T." and "R.M.L.T."

Protection of the title "Medical Technologist" may be confusing with other health technology professions, for example, medical radiation technologists.

Registration of medical laboratory technology assistants: Alberta does not require MLTAs to be registered with the ASMLT.

30. British Columbia Association of Laboratory Physicians

1 page letter and attachment from D. Innes, MB, President

See submission #8, the BC Medical Association at page 5.

31. Alberta Labour

2 page letter and attachment from Sheryl Prescott Paterson, Acting Director, Health Disciplines

See identical submission #29 at page 17.

32. Cardiology Technologists Association of BC (CTABC)

1 page letter from Ina Adams, President

Scope of practice: The CTABC notes that it was not included as a practitioner in this portion.

⁹ see attachment to Alberta Labour's letter, *Final Report and Recommendations of the Advisory Committee on Restricted Activities*. Submitted to the Health Professions Act Implementation Steering Committee, September 22, 1997.

Reserved acts: Opines that MLTechs are not qualified to evaluate quality control of electrocardiology.

Supervised acts for general technology services: Training and/or supervision in the area of electrocardiogram should not vest with MLTechs, not being their area of expertise.

33. **Diagnostic Accreditation Program (DAP)**

3 page letter and attachment from Gretchen Greer, Program Coordinator

Supports the application subject to the reservations noted below.

Scope of practice: Finds that the establishment of a MLT college will only be a benefit to the DAP. Challenges the statement that "*medical technologists are not regulated in BC*", and believes that BC is a leader in the regulation of medical laboratory practice.

Has a concern with the following statement:

[medical laboratory technology] requires the evaluation of the technical accuracy and reliability of the test results, and correlation of the test data with the patient diagnosis, for the purpose of supporting the diagnosis, treatment and prevention of disease by other health care practitioners.

It asserts that the purpose of the correlation of test data with the patient diagnosis is to perform quality assurance of the test. This is done by both technologists and laboratory physicians. The result is then used to support diagnosis and treatment. It finds that this definition should be reworded for the sake of clarity.

Finds the intent of this portion commendable but stresses that it should be specific to technologists performing tests. The limits of laboratory practice by technologists are already in place if these technologists are practising in an accredited facility.

Reserved acts: The DAP and the College of Physicians and Surgeons of BC find that the current medical laboratory structure is not a risk to the public and thus, they do not see the need for a reserved act. The DAP acknowledges a study conducted in California which found that laboratories staffed with and/or supervised by certified and licensed MLTechs "*perform more accurate and reliable medical testing than labs staffed by non-certified personnel*". The DAP recognizes that the institution of a MLT college can only augment current medical laboratory practice and accreditation in BC.

Supervision of shared reserved acts: Has the same comments as for reserved acts.

Supervised acts for general technology services: Believes that current laboratory practice standards have not harmed the public. It is the responsibility of the medical laboratory director to ensure that adequate, appropriately trained staff are in place.

Reserved titles: Its preference is "Medical Laboratory Technologist" or "Registered Medical Laboratory Technologist", as these terms emphasize the medical nature of the practice.

Registration of medical laboratory technology assistants: It agrees in principle with some degree of regulation of MLTAs. But as stated, the current practice of laboratory medicine is not harming the public.

Proposed practice limits: It agrees with the limits regarding interpretation and invasive procedures. The statement regarding routine duties is unnecessary as they are delegated by laboratory directors in accredited facilities. Laboratory directors are responsible for having appropriate protocols, guidelines and standards in place.

34. College of Physicians & Surgeons of BC

1 page letter from Dr. T.F. Handley, M.B., Ch.B., Registrar

Refers to submission #33 by the Diagnostic Accreditation Program, at page 18.

35. British Columbia Nurses' Union

3 page letter from Debra L. McPherson, Chair, Vancouver South Region

Scope of practice: Believes that only the first part of the BCSLS's proposed definition appears to be descriptive of the profession. The phrase "*...and requires the evaluation of technical accuracy...*" raises issues of competency that are not directly relevant to a definition. Proposes a rewriting to the following effect: "*...by evaluating test results and correlating test data to a patient's diagnosis and the treatment and prevention of diseases by other health practitioners*". Notes that the second part of the definition clearly speaks to the issue of professional competency and also sets out a justification for the definition. Argues that it should not be included in a scope of practice definition for MLTechs.

Reserved acts: Interprets this portion to contain three reserved acts after applying to it the Council's recent working paper on shared scope of practice:

- (a) quality control of specimen testing (or perhaps simply "specimen testing");
- (b) the evaluation of quality control results; and

(c) corrective measures to address the cause of inaccurate test results.

It first believes that none of the three reserved acts fall within or correspond with the Council's new list of possible reserved acts and they do not meet the criteria or risk of factors that the Council discussed in the working paper. Second, it believes that quality control principles and procedures, in particular in relation to specimen testing, is an issue of professional competency which is not within the framework of a reserved act. Third, it supports the BCSLS's recognition that quality control should be "shared" by other health care practitioners, but it also doubts that other professions are seeking a similar type of reserved act. It concludes that it does not believe there is sufficient risk of harm to the public associated with the services that are provided by MLTechs to warrant the BCSLS's proposed act.

Supervision of shared reserved acts: After asserting that quality control measures should not be a reserved act for MLTechs, it believes that there is no need to consider the question whether the proposed reserved act should be performed only under the supervision of MLTechs or other professions. It points out that to the best of its knowledge, MLTechs do not currently perform any risky service that is outside or beyond the supervision of another health care practitioner.

Supervised acts for general technology services: It points out that registered nurses perform services in relation to procuring specimens and performing ECGs, and can do so without supervision by MLTechs. It concludes that it sees no sufficient risk of harm to the public to warrant the proposed restrictions on supervision of the services.

Reserved titles: It has no objections to the proposed titles.

Registration of medical laboratory technology assistants: It believes that designation of MLTechs under the *Health Professions Act* should not proceed as it would duplicate many of the regulatory mechanisms the employer is currently responsible for under collective agreements with unions representing MLTechs.

Proposed practice limits: Since it believes that MLTechs need not be designated under the *Health Professions Act* there is then no need for practice limits. But it also generally agrees with the BCSLS's proposed practice limits.

36. **Margaret A.B. Clarke (medical laboratory technologist assistant)**

1 page letter

Believes that MLTAs should be included in the MLTechs college because MLTAs also ensure accurate laboratory test results. The BCSLS currently has a certification process for MLTAs in place and maintains a MLTA education committee.

HEALTH PROFESSIONS COUNCIL

Jim Chisholm, Co-Chair

Dianne Tingey, Member

Brenda McBain, Member

HEARING WITH RESPECT TO THE
DESIGNATION OF MEDICAL LABORATORY TECHNOLOGY
PURSUANT TO THE
HEALTH PROFESSIONS ACT

9:00 a.m. September 23, 1998
Robson Square Conference Centre
Conference Room 3

AGENDA

- 9:00 Opening remarks by the Chair
- 9:15 Frances Rosenberg, President
British Columbia Association of Laboratory Physicians
- 9:45 Sheila M. Woodcock, Registrar
College of Medical Laboratory Technologists of Ontario
- 10:15 **15 MINUTE BREAK**
- 10:30 Dr. Dick Muir, Chair
Diagnostic Accreditation Program
- 11:00 Mrs. Shelley Sanders
Canadian Society for Medical Laboratory Science
- 11:30 Jennifer Sherwood, Executive Director/Registrar
Alberta Society of Medical Laboratory Technologists
- 12:00 **1 HOUR LUNCH BREAK**
- 1:00 Andy Basi, President
Clinical Laboratory Management Association of BC

1:30 Richard Payne, Registrar
Cardiology Technologists Association of British Columbia

2:00 Daryl Green
BC Society of Clinical Perfusion

2:30 15 MINUTE BREAK

2:45 Michael Coutts, John Andruschak
BC Society of Respiratory Therapists

3:15 Linda J. Lytle, Registrar
College of Pharmacists of British Columbia

APPLICANT

3:45 Valerie Fenn, Chair, Licensure Committee
British Columbia Society of Laboratory Science

GLOSSARY

Throughout this report, the Council makes reference to the College submission and to the responses received during the consultation process. The Council has abbreviated its references to many of the responses received and for ease of reference, the Council has included the following glossary of terms and abbreviations used:

B. C. Society of Laboratory Science.....	Applicant/.BCSLs
Medical Laboratory Technology.....	MLT
Medical Laboratory Technology Assistants.....	MLTAs
College of Physicians & Surgeons of BC.....	CPSBC
Canadian Society for Medical Laboratory Science.....	CSMLS
Shared Scope of Practice Model Working Paper.....	Working Paper
BC Institute of Technology.....	BCIT
University of British Columbia.....	UBC
Diagnostic Accreditation Program.....	DAP