Standardizing the Professional Title of Medical Laboratory Professionals

A Position Paper of

American Society for Clinical Laboratory Science (ASCLS) and the American Society for Clinical Pathology Board of Certification (ASCP BOC)

The following sponsoring and participating societies of the ASCP BOC Board of Governors (BOG) support this position paper: AABB, American Association of Pathologists' Assistants (AAPA; Association of Genetic Technologists (AGT); American Society of Cytopathology (ASC); American Society for Clinical Laboratory Science (ASCLS); American Society for Clinical Pathology (ASCP), American Society for Microbiology (ASM); Clinical Laboratory Management Association (CLMA); National Society for Histotechnology (NSH).

Problem Summary

The medical laboratory profession has played an integral role in patient care, diagnosis, and treatment for approximately a century. There is, however, a lack of understanding among the public as well as other health care professionals of who we are, the nature of our work, and the critical influence laboratory data has on diagnosis and treatment. In addition, these groups do not comprehend the level of education and training necessary to achieve competency as a Medical Laboratory Scientist (MLS). Laboratory professionals feel a lack of respect from other healthcare professionals who should view us as peers. This may be due, in part, to the fact that we have limited direct patient interaction and/or that laboratories are often 'invisible' behind locked doors, in the basement, in separate buildings, or off site.

Interpretation of federal regulations governing standards for laboratory personnel has allowed those with insufficient laboratory-related education and training to perform moderate and complex testing, further diminishing the profession and confusing the health care community regarding required credentials for laboratory professionals.

Another aspect to this problem is that many educational programs closed in the 1990s, resulting in a workforce shortage that has lasted more than 20 years. In response, managers and administrators have hired non-Medical Laboratory Scientist credentialed individuals to perform laboratory testing.

To further complicate this situation, our professional credentials, how we refer to ourselves, how others refer to us, and the job/position titles for similarly educated individuals are not consistent. We refer to ourselves as Medical Technologists or Clinical Laboratory Scientists or Medical Laboratory Scientists, depending on degree program, certification, or job title. Job titles often do not reflect current professional credential designations. Some facilities use Medical Technologist while others have adopted the current professional credential designation of Medical Laboratory Scientist. Individuals use casual, non-professional terms such as 'med tech', 'lab tech', or 'tech' in referring to laboratory professionals. Unlike physicians, nurses, physical therapists, or other health care professionals, we have not adopted a single identity/title that in turn denotes us as a recognizable profession.

These factors contribute to a crisis in our professional identity not only within, but also external to the medical laboratory profession. Our name is important. Adopting a unified term is one step toward controlling our professional destiny. If we don't refer to ourselves in a consistent, recognizable,

professional manner, how can we expect the public and other health care professionals to regard us as a single profession, to acknowledge our professional identity, and to recognize the fundamental part we play in the health care team?

To summarize, - what's in a name? Everything important to our profession -- our professional identity, as well as recognition from the healthcare team, administration, government agencies, and the public. In addition, it affects recruitment to, and retention in, our profession. It is time we move to one name -- **Medical Laboratory Scientist**.

NOTE: This position paper focuses on the title for those with a baccalaureate degree. Individuals who have an associate degree and who have successfully met the requirements of a national certification program have minimal problems with consistency of title and will not be addressed in this paper.

Background

History of our name

One problem causing confusion about our identity is rooted in our professional history. We have changed our professional title and certification multiple times. Unlike other professions, we currently have multiple credentialing agencies, each with different titles and requirements to qualify for their examinations. Table 1 in the Appendix provides a comprehensive look at titles and certification agencies. Although some of the credentials listed are no longer available, individuals still use them when representing themselves as members of the profession. Several key points in our professional history illustrating the nomenclature changes are listed below.

- 1926 – ASCP resolution was passed to appoint a "Committee on the Registration of Laboratory Technicians" to define a technician and to differentiate classes of technicians.
- 1928 - permanent ASCP Board of Registry was created to issue certificates of registration. They adopted the classification of **Laboratory Technician** and **Medical Technologist** based upon minimum qualification standards.
- 1929 - original draft of Rules & Regulations of the American Registry of Medical Technologists was published in the *Journal of Laboratory and Clinical Medicine* and was entitled: "The **Registry of Technicians** – Proposed Working Scheme". The section "Classification of **Laboratory Technicians**" identified the **Medical Technologist** and **Laboratory Technician.** (The detailed section 'requirements for eligibility' is analogous to the current ASCP BOC eligibilities for certification.)
- 1931 - use of initials **L.T. (Laboratory Technician)** and **M.T. (Medical Technologist)** after the registrant's name was instituted. The parenthetical "ASCP" after L.T. and M.T. was adopted to clearly identify ASCP certification.
- 1933 - designation "**Registered Medical Technologist**" was restricted to college graduates. In the early years of the profession, the name **Laboratory Technician** was used interchangeably to mean <u>both</u> **Laboratory Technicians** AND **Medical Technologists**.
- 1936 - title "**Laboratory Technician**" was discontinued. All subsequent registrants were designated "**Medical Technologists**".
- 1939 - other organizations started to develop examinations and nomenclature for the profession. Over the years, this included American Medical Technologists (AMT), International Society for Clinical Laboratory Technology (ISCLT), and American Association of Bioanalysts (AAB). AMT has maintained the term Medical Technologist, as has AAB. The federal

government also provided an examination (now discontinued) to allow individuals to become Clinical Laboratory Technologists CLT(HEW). See Table 1 in the Appendix for the complete listing of agencies and titles.

- 1977 - National Certification Agency for Medical Laboratory Personnel (NCA) was formed by the American Society for Medical Technology (ASMT) as an independent certification body. NCA used the designations of **Clinical Laboratory Technician (CLT)** and **Clinical Laboratory Scientist (CLS)** as their designations for MLT and MT respectively.
- 2009 - NCA and the ASCP Board of Registry (BOR) unified to become a single certification agency, known as the ASCP **Board of Certification (BOC)**. Under the auspices of this new single certification agency, the professional credential designations for the profession became Medical **Laboratory Scientist (MLS) and Medical Laboratory Technician (MLT)**.

IMPACT OF MULTIPLE PROFESSIONAL TITLES

Educational requirements, program and degree names

- Educational requirements to sit for the credentialing examination have also been an issue. At one time a baccalaureate degree was not required, only a specified number of college credits/hours. In 1973, ASCP Board of Registry (BOR) began to require a baccalaureate degree as part of the educational requirements to sit for the Medical Technologist (MT) credentialing examination. Some credentialing organizations, however, still do not require this crucial minimal educational qualification.
- Educational institutions or hospitals have changed the names of programs or departments over the years to mesh with the professional credential designations. Not all, however, have made the change. See Table 2 in the Appendix for a breakdown of current program titles. There is also lack of a standardized degree title designated to those who earn a bachelor's degree in a laboratory profession. Therefore, graduates can have different degree titles on the diploma and may refer to themselves based on degree title rather than credential title.

Federal Regulations

- Federal government regulations have further complicated the evolution of our professional name and identity. Under the Clinical Laboratory Improvement Amendments (CLIA) passed by Congress in 1988 individuals with a bachelor's degree in a biological, chemical or physical science may legally function as personnel who test human samples in hospitals, public health settings, and in reference laboratories. In turn, human resource departments and laboratory managers have created their own job categories for these individuals or, even worse, have placed them in the same job category as the credentialed MLS. Just recently, the Center for Medicare and Medicaid Services (CMS) clarified their interpretation of CLIA 88, stating that a bachelor's degree in nursing is equivalent to a bachelor's degree in biology or MLS for the purpose of performing high complexity laboratory testing. Those with specific MLS education and certification maintain there is a difference in educational content compared to other science bachelor's degrees. Few believe there is equivalence in preparedness, test performance, decision-making and problem-solving skills. Although recent data demonstrating the value of MLS education and certification are lacking, literature from the 1990s is supportive of these differences.

Workforce shortage and hiring of non-MLS in the laboratory

- Another aspect to this nomenclature problem is that many educational programs closed in the 1990s, resulting in a workforce shortage of appropriately educated and trained individuals that continues to this day. Numbers of graduates have not kept up with the vacancies. The most recent ASCP Vacancy Survey reported vacancy rates between 5.68% and 11.48%, depending on laboratory department. In turn, the Bureau of Labor Statistics (BLS) has projected an 11% increase in job growth (combined MLT and MLS) of about 35,000 new positions between 2018 and 2028. In response to current shortages, managers and administrators have hired non-MLS credentialed individuals to perform laboratory testing. These individuals may have a bachelor's degree in a biological or chemical science, but no specific medical laboratory training and no certification. In many cases, they have no educational background in the scientific or quality assurance concepts so inherent in MLS education -- only on-the-job training in one area of the laboratory. The certified MLS and MLT should be distinguished from other laboratory workers. No one other than a nurse, physician, dietitian, physical therapist (PT) or occupational therapist (OT) would be allowed to perform the duties of these professionals. Neither is there any confusion about who these professionals are. No one would be given the job title of nurse or PT or OT without specific educational degree. Neither should this be the case for the medical laboratory profession.

As is evident, our professional history demonstrates a lack of a standardized credential. We have a checkered past with respect to professional name and credential. At one time, the title technician was applied to all; at other times there was a distinction. This has resulted in a situation in which there is no standardized nomenclature among employers leading to confusion for pay grade, educational programs, regulatory agencies, certification agencies, and the public. We have allowed shorthand references such as 'med tech', 'lab tech', and 'just a tech' to cause further ambiguity to our professional identity. The designation for laboratory professionals needs to be standardized and broadly communicated.

Positions

Given these challenges and threats to the profession, we need to identify and adopt a standardized credential and title for those with education (baccalaureate degree) and training in the medical laboratory sciences. Names of educational programs and job titles should parallel the credential. It is also important that those with MLS education and certification be distinguished from those with a bachelor's degree in a science and no certification.

The ASCP BOC and ASCLS:

- support the designation of **Medical Laboratory Scientist** for all who have graduated with a baccalaureate degree and have successfully met the requirements of a national certification program.
- support the designation of Medical Laboratory Technician for those who have graduated with an associate degree and have successfully met the requirements of a national certification program.

- encourage all educational programs to adopt the term Medial Laboratory Science or Medical Laboratory Technician - as appropriate - as the formal designation for programs to further establish the continuity between educational program and professional credential.

- encourage, support, and endorse all efforts to use the job title of Medical Laboratory Scientist for those with a baccalaureate degree who have successfully met the requirements of a national certification program.

- encourage, support and endorse all efforts to use the job title of Medical Laboratory Technician for those who have an associate degree and who have successfully met the requirements of a national certification.

- support and endorse all efforts to find alternate job titles for those with any education and training other than what has been stated above.

SUMMARY

In summary, ASCLS and the ASCP BOC acknowledge the importance of standard nomenclature to link educational program, credential, and job title. We realize to move the entire Medical Laboratory Science professional body in this direction is a substantial undertaking. Managers and human resource departments at hospitals, reference laboratories, and public health facilities will need to re-evaluate and rename job categories and titles. Educational programs may need to change the title of their program which may involve significant resources at the institutional and state level. Most importantly, individuals will need to rethink how they refer to themselves and consistently use the title **Medical Laboratory Scientist**.

We would not make this proposal and suggest the laboratory community go to this effort if we believed the *status quo* was an advantage to the profession. These changes will not resolve all of the issues related to lack of recognition from other health care professionals. They will not assure that everyone recognizes and values the laboratory's integral role in providing care every day. However, this initiative for a single professional designation and title is a step in the right direction and will help to cement our professional identity and control our professional destiny. In turn, it will clarify the role we play in patient care for other health care professionals, the public, and ourselves. It is in a name!

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APPENDIX

Table 1. Certification and Licensure Agency Designations for Laboratory Staff in 2019

Organization	Title	Designations
American Association of Bioanalysts (AAB)	Medical Technologist Laboratory Technician	MT (AAB) MLT (AAB)
AAB Board of Registry*	NA[1]	NA[1]
American Medical Technologists	Medical Technologist Medical Laboratory Technician	MT (AMT) MLT (AMT)
ASCP Board of Certification	Medical Laboratory Scientist (under mandatory CMP) Medical Technologist (voluntary CMP) Medical Laboratory Technician	MLS(ASCP)^{CM} and MLS(ASCP^{i})^{CM} MT(ASCP) and MT(ASCP^{i}) MLT (ASCP)
HHS (Health & Human Services)	NA[2]	NA[2]
National Credentialing Agency for Laboratory Personnel (NCA)	NA[3]	NA[3]
California State License	Clinical Laboratory Scientist Medical Laboratory Technician	CA CLS CA MLT
New York State License	Clinical Laboratory Technologist Clinical Laboratory Technician	none

*Formerly ASCLT Credentialing Commission

NA[1] - Credentials no longer available: Registered Medical Technologist; RMT (ISCLT) and Registered Laboratory Technician; RLT (ISCLT)

NA[2] – Credential no longer available: Clinical Laboratory Technologist; CLT (HEW)

NA[3] – Credentials no longer available. Merged with ASCP. Formerly: Clinical Laboratory Scientist; CLS (NCA) and Clinical Laboratory Technician; CLT (NCA)

Table 2. Program Designations from NAACLS

NAACLS Program Designations			
Medical Laboratory Science Programs			
MLS	CLS	MT	Other
61%	28%	10%	1%
Medical Laboratory Technician Programs			
MLT	CLT	Other	NA
92%	7%	1%	---