

The Doctorate in Clinical Laboratory Science: the Keystone Practitioner for the Profession

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ABBREVIATIONS: ASCLS = American Society for Clinical Laboratory Science; CLEC = Clinical Laboratory Educators Conference; CLS = clinical laboratory science; DCLS = doctorate in clinical laboratory science; PDTF =Professional Doctorate Task Force.

INDEX TERMS: advanced practice; clinical doctorate; clinical laboratory science; professional doctorate.

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So many world events characterize these times as revolutionary it's appropriate that clinical laboratory science would evolve, during this decade in this new millennium, into a self-defining, self-determining, and self-sustaining profession with the introduction of the keystone degree, the professional doctorate.

WHAT IS HISTORY...

A national debate involving all interest groups within the clinical laboratory science (CLS) community occurred over the course of several years during which the profession determined that the "gap" in the healthcare delivery system defined laboratory practice as different enough from the practice of the

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baccalaureate entry level clinical laboratory scientist to warrant the design of a new practitioner. National professional debate also clarified that the academic level of this practitioner should be the doctorate, thus focusing further professional attention on creation of this terminal degree rather than on changing the professional academic entry level. This new practitioner is not the result of academic "degree creep". The concept represents advanced practice built on expanded, complex knowledge of rigor comparable to established professional doctorates like the EdD, DO, JD, and MD.

During the course of professional debate, comprehensive assessments of the healthcare environment were conducted with input from both academia and practice. From these studies, convincing data were extrapolated defining multiple gaps in the healthcare delivery system that would benefit from a doctorally-prepared clinical laboratory practitioner able to apply knowledge, skills, and abilities from the clinical laboratory to administrative, public policy, and most important, patient care situations. Since laboratory information is estimated to comprise 60% of the patient record (and 70% of information used in medical decision-making), serving in this capacity could only improve overall health outcomes.^{1,2,3}

Developing consensus from evidence on issues that would frame the professional doctorate, the American Society for Clinical Laboratory Science (ASCLS) has developed and adopted position papers regarding advanced practice, the career ladder, and independent practice.^{4,5,6} These thoughtful and thorough environmental analyses have documented the increasing complexity of CLS practice and described the gap in healthcare delivery that would be, and should be, filled by the doctorate in clinical laboratory science (DCLS). Until now, laboratory practitioners interested in advanced education received graduate degrees in other related fields of study. The DCLS, prepared to practice in clinical venues, manufacturing, and academia, will enhance recruitment into the profession, enriching the practice of the baccalaureate entry level practitioner by providing direct patient access and affording career advancement opportunities.

In addition, the DCLS will contribute to the CLS body of knowledge by requiring competency in translational

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research in evidence-based practice. This research will lead to increases in patient safety and medical effectiveness that translate directly into cost-savings for the healthcare delivery system. Given data derived from thorough six sigma studies of laboratory operations, the conclusion is that “good quality [services provision] costs less than poor quality” since the need for repeat, duplicate studies is obviated. In the infancy of DCLS implementation, these cost-savings will justify, and fund, DCLS practice.

WHAT IS NOW...

In July 2005, the Professional Doctorate Task Force (PDTF) was commissioned by then ASCLS President, Susan Morris. The PDTF was charged to “implement a professional doctorate pilot project involving one or more universities that will develop degree programs, and publish a white paper

that demonstrates the importance and value of the doctoral level clinical laboratory professional’s role in the healthcare delivery system.”

Addressing this ASCLS charge, a 19-person committee was assembled (see Table 1) and further focused into working groups assigned to investigate the topical areas of (1) needs assessment, (2) practice, (3) curriculum, (4) funding, (5) reimbursement, and (6) certification/licensure. These working groups have worked collaboratively to establish an extensive document library, produce competencies and program curriculum, and identify potential funding sources for program implementation. In addition, models of reimbursement and elements of independent practice common to other healthcare professions as well as current certification models for the profession have been examined for relevancy to the DCLS.

The findings of this extensive research into the direction of the healthcare delivery system and preparation of practitioners functioning within it indicate the potential for this terminal doctorate practitioner to lead the laboratory industry. The professional doctorate will be accredited by the specialty accrediting body within the profession, the National Accrediting Agency for Clinical Laboratory Sciences. Since institutions vary as to their ability to offer the PhD and/or the clinical (professional) degree, model program curricula are being developed to allow for accreditation of the professional doctorate as well as the clinical (professional doctorate) portion of the PhD. The difference between the two degrees, professional doctorate and PhD, is institutionally-defined research.

WHAT WILL BE...

Multiple institutions, both public and private representing all regions of the country, have expressed a desire to begin DCLS programs. Since institutions vary as to their ability to offer the PhD and/or the clinical (professional) degree, this year (2006-07) a working group of the PDTF focused on specific program implementation issues will develop models to be utilized as appropriate in the institutional application and approval process. Further, issues of program access and delivery will be addressed by identifying the principles on which distance delivery platforms and program consortia can be built.

In parallel with these efforts, another PDTF working group is finalizing detailed curriculum including model course descriptions and objectives to guide institutions interested in program implementation in their resources assessment. The working group is planning to introduce the completed curricular models in December 2006.

Table 1. ASCLS Professional Doctorate Task Force: 2006-2007 membership roles

Members

Elizabeth Leibach (chair)
Cheryl Caskey
Anna Ciulla
Kathy Doig
David Fowler
Vince Gallicchio
Susan Leclair
Susan Morris
Teresa Nadder
Margaret (Cece) Schmidt
Gilma Roncancio-Weemer

Liaisons

Susan Beck, ASCLS Practice Levels Task Force
Dianne Cearlock, NAACLS
Paula Garrott, CCCLW
Olive Kimball, NAACLS emeritus
Mary Ann McLane, ASCLS Board of Directors
Elissa Passiment, ASCLS staff
John Snyder, ASCP

Advisors

Bernie Bekken, ASCLS Past-president 2006-07
Shirlyn McKenzie, ASCLS President 2006-07
Herb Miller

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For the 2007 Clinical Laboratory Educators Conference (CLEC) in Louisville, Kentucky (February 22 – 24), the PDTF plans to sponsor several activities. First, there will be a general information and progress update session during which implementation issues related to program standards, model curriculum, distance delivery, and consortia will be discussed. The task force also plans to unveil a data collection process for documentation of committed interest in program implementation on the parts of institutions. The results of the data collection process will be shaped into concrete plans for program implementations later this year at the ASCLS national meeting in San Diego, California (July 17 – 21, 2007). Lastly, *Clinical Laboratory Science* and *ASCLS Today* will publish updates throughout 2006-07 to inform the readership of the latest developments.

The professional doctorate in clinical laboratory science is indeed evolving from concept to reality. Continue to moni-

tor our professional literature and the ASCLS website (www.ascls.org) for progress updates and ways to become involved in the implementation process.

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