Editorial

Technology, Molecular Diagnostics and Current Challenges in Educating Laboratory Professionals and Clinical Practice

Patricia Tille Ph.D MLS(ASCP) AHI (AMT) FASC
IJBLS Editor in Chief

Over the last decade health care has seen tremendous advancements in technology that is changing the way patients are diagnosed and treated. The SARS-CoV-2 pandemic, along with the increased cases in Monkey Pox across the globe have brought significant attention to the laboratory and the need for highly skilled professionals.

Molecular diagnostics has provided a means to rapidly identify infectious diseases such as SARS-CoV-2 to improve diagnosis and treatment, but also to monitor transmission and implement preventative measures. But molecular diagnostics is more than a faster way to diagnose infectious diseases. Molecular technology has provided medicine with a means to monitor the progression of cancer and cancer treatment, develop vaccines, and genetically alter cell populations to create advanced therapeutic options that are individualized for patient treatment.

This edition of the journal provides a variety of insights into the challenges that face educating laboratory science professionals to meet the needs of a decreasing global workforce as well as new pedagogical methods. Changes in education and clinical experiences are needed to meet the shortage of professionals, but also to embrace the use of new technology and training of advanced practice laboratory professionals.

In addition to educational challenges, the articles highlight some of the technological advances that are evident in the use of molecular diagnostics and research methods that advance our understanding of complex diseases. This technology is rapidly changing and will continue to expand the impact laboratory science professionals have on medical care beyond diagnostics. Now is the time to embrace the future, and utilize new ideas to educate the future professionals that will be equipped to meet these challenges.

Sincerely, IJBLS Editor in Chief,

Patricia Tille Ph.D. MLS(ASCP) AHI(AMT) FACSc