In this month’s issue Silvia Spitzer, PhD, HCLD(ABB), discusses the use of restriction endonuclease and polymerase chain reaction in the diagnosis of the factor V Leiden mutation, an abnormality, unknown 10 years ago, that is the most frequent diagnosis in cases of inherited hypercoagulability. Also, the CE Update on cardiac markers by Julie Rosales, MS, MT(ASCP), discusses two tests introduced in the 1990s: cardiac troponins and myosin light chains. And not unexpectedly, she tells us that a new generation of cardiac markers is on the horizon. Lori Larson, MT(ASCP), and her colleagues discuss the diagnosis of heparin-induced thrombocytopenia and their favorable experience in detecting the responsible antibody with an enzyme-linked immunosorbent assay that compared well with the considerably more complex serotonin release assay. Gene Gulati, PhD, and colleagues conclude from their study that the reliability and cost-effectiveness of the flagging system of the Coulter-STKS (Beckman Coulter, Miami) is in need of improvement, but add that the manufacturer has informed them that the latest version of the software for the instrument provides significant improvement for the flagging system.

And so it goes in the rapidly changing field of laboratory medicine: continual introduction of new or improved tests that are said to fill gaps in the testing menu or to have advantages when compared with existing methods.

In addition to rapidly changing technology, factors such as economic pressures and changes in the way that medical care is being delivered are presenting great challenges to laboratorians. Not the least of these challenges is the selection of new or improved tests for addition to the menu and of outdated or deficient tests for pruning from the laboratory’s offerings. As Susan Yox, RN, EdD, asks in this month’s feature article on evaluating tests and selecting the best tests, “How can judgments be made about whether a new test is better than the old standby?” Developing, evaluating, and selecting tests has changed as much as or more than other segments of laboratory medicine. Yox calls to our attention such factors as evidence-based medical decision making, patient outcomes, and cost-benefit ratios, concepts that few of us applied to evaluating tests until recently. Also included are more familiar criteria such as accuracy, precision, linearity, and logistical feasibility.

The staff and volunteers involved in the production of Laboratory Medicine are committed to presenting readers with information that will help them to continue to be the best-possible professionals. We trust that the articles discussed here will help meet that objective.