Theme Issue: Heart Health and the Clinical Laboratory

This is Clinical Chemistry’s first Theme Issue. By several measures, it has been an interesting and successful new venture.

Members of the Board of Editors discussed the concept of a theme issue less than a year ago. Dr. Fred Apple graciously agreed to serve as Guest Editor of the issue. Following the call for papers, nearly 100 manuscripts were considered for inclusion, creating intense competition for the Journal’s limited page space. All manuscripts, including the invited editorial, underwent the Journal’s usual intense peer-review.

To complement the peer-reviewed papers, we reprint in this issue a key article on acute coronary syndromes. We believe that this article is sufficiently important to clinical chemists to warrant this highly unusual action. (It is, indeed, unique in my tenure as Editor to reprint an article that is available elsewhere.) Of special importance for clinical chemists is the changing role of cardiac markers and the major role of cardiac troponins in the evaluation of acute coronary syndromes.

We note with considerable pride the important contributions of current and past members of this Journal’s Board of Editors to the research and deliberations that led to the recognition of the role of cardiac troponins. We think of members such as former Chair of the Board Jack Ladeson, Fred Apple, Robert Christenson, Allan Jaffe (who chaired important groups in this effort and published key papers), David Sacks, Nader Rifai, and Roland Valdes, Jr. as well as many other respected authors and reviewers, both currently active and retired. Medicine and patient care are better for their efforts, and for the ongoing efforts of clinical chemists to refine, manufacture, and standardize these assays, interpret their results, and keep them in good control every day of the year.

Although we take pride in publishing this Theme Issue, its ultimate test is with you, the reader. We are anxious to hear your reactions. If you find that it was useful, we welcome your suggestions for topics for future Theme Issues that can highlight subjects relevant to your scientific interests and clinical needs.

New Members of Editorial Board

Mark E. Meyerhoff and W. Edward Highsmith, Jr. are new members of the Board of Editors of Clinical Chemistry. We welcome them both, and this month we highlight Dr. Meyerhoff.

Dr. Meyerhoff is Professor of Chemistry in the Department of Chemistry at the University of Michigan, Ann Arbor. He received his PhD from the State University of New York at Buffalo in 1979. Following a short postdoctoral stint at the University of Delaware, he joined the faculty at Michigan as an Assistant Professor in the Fall of 1979. His research interests are in the field of analytical chemistry, particularly the development of new ion-, gas-, and bio-selective electrochemical sensors suitable for whole blood measurements of clinically important analytes. As a consultant, he was closely involved in the development of the first successful point-of-care blood-gas and electrolyte analyzers, which were introduced to the clinical market in the 1980s. Currently, he also has active research programs in the areas of novel non-separation immunoassay methods, immobilized metalloporphyrin phases for liquid chromatography, and the development and characterization of novel nitric oxide-releasing polymeric materials for biomedical applications. He and his collaborators have authored more than 200 original research papers on these various topics over the past 20 years.

In addition to his new role on the Board of Editors for Clinical Chemistry, Professor Meyerhoff continues to serve on the editorial/advisory boards of Biosensors & Bioelectronics, Electroanalysis, Analytica Chimica Acta, and Applied Biochemistry and Biotechnology. He is also active as a consultant and/or is on the Scientific Advisory Boards of several commercial biomedical companies.

Carl-Bertil Laurell is the Edwin F. Ullman Awardee for 2001

Carl-Bertil Laurell, MD, PhD, will receive the fourth annual Edwin F. Ullman Award at the AACC’s upcoming Oak Ridge Conference in Seattle on May 4.

The award, sponsored by Dade Behring, was established to recognize outstanding contributions that advance the technology of clinical laboratory science. In conjunction with receiving the award, Dr. Laurell will make a presentation, entitled “Bench Side Medicine”.

Dr. Laurell was appointed head of the clinical laboratory at Malmö General Hospital in 1954. He remained there until 1984, when he retired, holding the titles of Chairman of the Department of Clinical Chemistry and Professor at Lund University in Malmö, Sweden.

A giant in the field of electrophoresis, Dr. Laurell’s contributions to improving this technique led to major breakthroughs in protein analysis. For example, Dr. Laurell demonstrated the clinical utility of several proteins of note, including transferrin, ceruloplasmin, haptoglobin, and α1-antitrypsin.

His flair for research is illustrated by an incident in which a technician mistakenly used tap water instead of distilled water in an electrophoresis buffer. The anomalies in the results...
led Dr. Laurell’s team to the realization that the addition of calcium ions to the electrophoresis buffer could cause the splitting of the β-fraction in ways that supplied better clinical information, a discovery that influences the performance of electrophoresis to this day.

Dr. Laurell developed the method known as rocket immunoelectrophoresis, which became a mainstay for quantifying certain proteins. Another method that he developed for separating and identifying proteins, called crossed immunoelectrophoresis, led to major progress in elucidating the role of proteolytic enzymes and the regulation of their activity. This method led to the discovery and improved diagnosis of diseases caused by disruptions in those regulatory systems. Perhaps the most important was his discovery of α₁-antitrypsin deficiency, the most common hereditary disease in his native Sweden.

Dr. Laurell has published 200 scientific papers in international journals (including four Current Contents’ “Citation Classics”) in a career that has stretched over decades. He received the AACC Lectureship Award in 1965.

The Edwin F. Ullman Award, which includes a plaque and a $5000 honorarium, is sponsored by Dade Behring. It was created to honor Dr. Ullman and recognizes his contributions to the former Behring Diagnostics and to the field of clinical chemistry. A pioneer in immunoassay technology who received more than 150 US patents, Dr. Ullman’s best-known accomplishment was the development of the Emit assay, an advance that revolutionized testing for both abused and therapeutic drugs.

**AACC Meetings**

*Professional Practice In Clinical Chemistry: A Review.* This 5-day intensive review of fundamental and state-of-the-art practices is scheduled for April 29–May 3, 2001, in Alexandria, VA. Information: phone 202-835-8705 or 800-892-1400, ext. 705; fax 202-887-5093; or access AACC Online at www.aacc.org.

**Other Meetings**

*Global Odyssey 2001.* Accreditation is a way of life for medical laboratories, and external quality assessment and proficiency testing programs are an important part of that process. *Global Odyssey 2001* is a 2.5-day international conference on proficiency testing for medical laboratories, consisting of invited lectures, discussion groups, and poster presentations. The conference is designed to benefit those who provide proficiency testing programs, participate in quality management of medical laboratories, provide laboratory accreditation programs, are interested in developing regional or country specific PT programs, or have special interest in developing or strengthening international program partnerships and mentoring.

The *Global Odyssey 2001* Conference will be held September 23–25, 2001, at the Crowne Plaza Ravinia Hotel, Atlanta, GA (USA). There is no registration fee, but registration is limited and first consideration will be given to those individuals registered by March 16, 2001. Further information: http://www.phppo.cdc.gov/dls/mlp/go2001.asp; or Division of Laboratory Systems, Public Health Practice Program Office, Centers for Disease Control and Prevention, 4770 Buford Hwy NE, Mailstop G-25, Atlanta, GA 30341-3717; fax 770-488-8282.