

INDIA
SECTION

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AACC India Section cordially invites
you for the Webinar
**ENHANCING PATIENT CARE
WITH MASS SPECTROMETRY**

August 30, 2022 5:30 - 7:00 PM IST, 8:00 - 9:30 AM EST

ABSTRACT

Improvement in Patient Care with Implementation of LC-MS/MS in Clinical Laboratories

Dr. Ravinder J. Singh

Until recently most of the phenotypic information on congenital endocrine disorders have relied on biochemical testing of steroids, biogenic amines and peptides but is now being combined with the molecular testing. In spite of the mutational analysis of endocrine disorders, the correlation of the phenotype relies more on biochemical testing than the molecular testing. Immunoassays have been the methodology of choice for the analysis of steroids and amines in making diagnosis of patients affected with Cushing's, Pheochromocytoma and Congenital Adrenal Hyperplasia (CAH). But very often the results from the endocrine laboratory had to be repeated with the HPLC-extraction assays to rule out the possible cross reactivities with the glucocorticoids, steroid metabolites and drugs with the antibody detecting the analyte. In the past, the use of gold standard MS technology in the clinical diagnostic labs has been limited because of labor intensive extraction, sample preparations and chromatographic separations. Recently the use of MS/MS (tandem MS) technology in liquid and gas chromatography has revolutionized the application of MS technology in clinical laboratories. This is due to reduction in effort for extraction and chromatography and, as a result, has a scope for expediting the analysis of steroids, biogenic amines and peptides for the diagnosis of various endocrine disorders. We at Mayo Clinic have implemented this technology for the routine analysis of steroids, biogenic amines and peptides. These methods not only provide reliable results for endocrine disorders but also can be used as reference methods by other laboratories and accreditation agencies.

Enhancing Clinical Services with Advance Clinical Mass Spectrometry Services

Dr. Victoria Zhang

Mass spectrometry has been proven to be one of the fastest growing and powerful platform for the clinical diagnostic. The increasing application of mass spectrometry in clinical analysis, such as drug of confirmation, hormones, steroids, therapeutic drugs, microbiology and peptide measurement, have brought a tremendous amount of excitement in the field of clinical chemistry and clinical diagnostics. The lecture will provide an overview of the cutting-edge development in this field, the emerging applications of mass spectrometry as well as the challenges and the national and international efforts that have taken place to further the growth of this exciting field for the betterment of patient care. We will discuss specific considerations for implementing and training in the laboratory to successfully implement the mass spectrometry platform in clinical laboratories for the betterment of patient care.

SPEAKERS



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Dr. Victoria Zhang

*Director, Clinical Chemistry &
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*Professor, Department of Pathology
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ENHANCING PATIENT CARE WITH MASS SPECTROMETRY

PANELISTS



Dr. Aditi Chatterjee
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Strand Life Sciences, Bangalore*



Dr. Harsha Gowda
*Group Leader
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PANEL MODERATOR



Dr. Kannan Vaidyanathan
*Professor and Head Biochemistry
Believers Church Medical
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AACC INDIA SECTION OVERVIEW



Dr. Barnali Das
Chair, AACC India Section

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