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Metabolic Phenotyping: Applications in diagnosis, treatment prediction and system diagnostics

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Metabolomics opens the unique chance of being closer to the phenotype than ever before and will lead for the first time to a comprehensive understanding of biochemical pathways in life systems. It also allows for the identification of biological markers, which can serve as early disease indicators as well as therapeutic markers for the evaluation of treatment effects.

Metabolic Phenotyping is applicable for in depth investigations in many fields of basic and applied research (nutritional research, clinical research, pharmaceutical drug research) and personalized medicine. New found results from the field of metabolomics have the potential to revolutionize the understanding of complex human diseases, clinical diagnostics, molecular mechanisms and biological pathways.

Particularly, BIOCRATES Metabolic Phenotyping platform can be applied in early disease diagnosis and prognosis by looking at broad panels of metabolic signatures rather than single biomarkers. The platform allows for comprehensive system analysis of surrogate-biomarkers that can be used as fingerprints for diseases profiling, drug response studies, environmental influences and nutrition.

The essence of Metabolic Phenotyping is accurate metabolic measurement. By the use of our standardized methods, over 600 analytes can be quantified easily and quality controlled with high reproducibility and accuracy. This set of analytes consists of the following classes: acylcarnitines, amino acids, biogenic amines, sugars, eicosanoids, lipids, steroids, neurotransmitters, bile acids, energy metabolism, oxysterols and vitamins.

Biography

Earned a Ph.D in Molecular, Cellular Developmental Biology and Genetics training. Manually set for 9 April. Manuel will from The University of Minnesota-Twin Cities and completed a Postdoctoral Fellowship appointment at The University of California, San Francisco with emphasis in Advanced Training in Clinical Research. Held prior positions in Business Development for a Pharmaceutical CRO and as Science Development Director for a Metabolomics Biotech Company. Currently serves as a Metabolomics Consultant throughout North America.

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