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***HUMANITY, SCIENCE, TECHNOLOGY:  
THE SYSTEMIC FOUNDATIONS OF THE  
INFORMATION AGE***

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**ABSTRACTS**

**MARTIN L. W. HALL  
JENNIFER WILBY  
EDITORS**

**B. A. BANATHY, PRESIDENT  
AND CHAIR, LOCAL ORGANIZING COMMITTEE**

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# **Adding Balascopy-Based General Systems Feature to What is Known in Liver Diseases**

**Vadim I. Kvitash**  
Department of General Internal Medicine,  
School of Medicine,  
University of California at San Francisco  
2299 Post Street Medical Building, Suite 306,  
San Francisco, California 94115

It is a known fact, that in general, determination of routinely ordered tests for liver functions are not specific for liver diseases. The purpose of this presentation is to demonstrate methodology and domain-free tools for mining diagnostic and prognostic information from non-specific biochemical variables routinely used in a clinical assessment of liver diseases even if test results are seemingly normal. For simultaneous (1) quantitative, (2) qualitative, (3) relational, and (4) directional evaluation of interactions among multiple data points, their values translate into Natural System Equivalent Units scaled from 0 to 100, allowing direct measurements of their multiple imbalances / dysbalances in multi-dimensional space. Information from twelve-dimensional metabolic spaces are represented as meta-networks of six distinct types of homeostatic Systems Dysfunctions. These multiple metabolic dysfunctions are defined and designated as follows:

- Systems Inversion
- Systems Simple Inversion
- Systems Integration
- Systems Inverted Integration
- Systems Disintegration
- Systems Inverted Disintegration

All six types of homeostatic Systems Dysfunctions are represented as a cascade of six meta-network windows of simple biochemical imbalances and multiple metabolic dysbalances.

These tools identified previously unknown patterns of biochemical imbalances in eighteen different liver diseases.

Balascopy provides a whole new understanding of systemic disruption of metabolic functions underlying hepatopathology. It represents, evaluates, and measures metabolic processes as an entirely integrated system. This technology can assist in making truly Evidenced-Based Diagnostic and Treatment Decisions.

Keywords: Balascopy, Systems Feature in Liver Diseases Biochemistry, Meta-Networks

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