

INVITED LECTURE H4

Proteomics and metabolic flux. Can expression proteomics be used to interpret metabolic flow?

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Several of our proteomics projects have a metabolic emphasis. This includes work with mammalian, plant and microbial systems. Like others we detect changes in protein expression that seem to be metabolically relevant although much conventional biochemical wisdom is that enzymes are present in excess of metabolic requirements and rate control is applied by regulation of pre-formed enzyme activity. There is therefore a need to develop systematic approaches for interpretation of the metabolic and other biological effects of change of protein abundance measured by large-scale proteome profiling.