PublisherInfo				
PublisherName		BioMed Central		
PublisherLocation		London		
PublisherImprintName	\Box	BioMed Central		

FANCY metabolomics

ArticleInfo		
ArticleID	:	3951
ArticleDOI	:	10.1186/gb-spotlight-20010109-01
ArticleCitationID	:	spotlight-20010109-01
ArticleSequenceNumber	:	22
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	:	2
ArticleHistory	:	RegistrationDate : 2001–01–09 OnlineDate : 2001–01–09
ArticleCopyright		BioMed Central Ltd2001
ArticleGrants	:	
ArticleContext	:	130592211

William Wells

Email: wells@biotext.com

In the January Nature Biotechnology, Raamsdonk *et al.* find that, even when mutation of a gene causes no obvious phenotype, metabolite profiling can still give clues to gene function (*Nat Biotechnol* 2001, **19:**45-50). Their test case involves two yeast strains deleted for either one of the two redundant genes for 6-phosphofructo-2-kinase (6-PF-2-K). These deletion strains fail to show a growth defect, even in chemostat competition experiments, but an analysis of specific metabolites clearly sets them apart from wild-type yeast. Raamsdonk *et al.* then test a more general method, in which the extracts from the two deletion strains and several other metabolic mutants are analyzed by 1H-NMR spectroscopy. Even without identifying the individual metabolites whose concentrations have changed, the two 6-PF-2-K mutants can be clustered together based on the similar changes in particular peaks. This method, dubbed functional analysis by co-responses in yeast (FANCY), is now being applied to a collection of yeast deletion mutants.

References

- 1. Nature Biotechnology, [http://www.nature.com/nbt/]
- 2. Functional characterization of the *S. cerevisiae* genome by gene deletion and parallel analysis.