PublisherInfo		
PublisherName	:	BioMed Central
PublisherLocation	:	London
PublisherImprintName	:	BioMed Central

Bacterial ancestors

ArticleInfo		
ArticleID	:	4483
ArticleDOI	:	10.1186/gb-spotlight-20020517-01
ArticleCitationID	:	spotlight-20020517-01
ArticleSequenceNumber	:	149
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	:	2
ArticleHistory	:	RegistrationDate : 2002–5–17 OnlineDate : 2002–5–17
ArticleCopyright	:	BioMed Central Ltd2002
ArticleGrants	:	
ArticleContext	:	130593311

Jonathan B Weitzman
Email: jonathanweitzman@hotmail.com

Earlier studies of ribosomal RNA (rRNA) sequences have concluded that the oldest living organisms were hyperthermophilic. In the May 16 Nature, Céline Brochier and Hervé Philippe from the Université Pierre et Marie Curie in Paris, France, report a re-analysis of bacterial phylogeny that challenges this dogma (*Nature* 2002, **417:**244). It is widely accepted that rRNA sequences present a useful tool for constructing phylogenetic trees. But Brochier and Philippe claim that these data should be approached with caution, and they have used a refined strategy that uses only conserved, slowly evolving positions. Their deduced phylogeny shows late emergence of hyperthermophiles; they suggest that the earlier conclusions were biased by artefacts related to fast-evolving positions. Brochier and Philippe found that Planctomycetales emerged at the base of the bacterial tree and suggest that "the origins of bacterial tree should be seriously reconsidered".

References

1. Hyperthermophiles in the history of life.

2. *Nature*, [http://www.nature.com]

3. Université Pierre et Marie Curie , [http://www.snv.jussieu.fr]