

Online collaboration identifies bacteria

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A new website has been launched which allows scientists everywhere to collaborate on the identification of bacterial strains. This new resource, described in the open access journal *BMC Biology*, provides a portal for electronic bacterial taxonomy.

The multilocus sequence analysis website, www.eMLSA.net, was developed by an international team of researchers coordinated by Professor Brian G Spratt of Imperial College London. He said, "Bacteria are currently assigned to species by cumbersome procedures and every unknown bacterial isolate has to be compared to many others to find out what species it is. Our website functions as a kind of taxonomic wikipedia, allowing many hands to make short work of the entire process".

Species identification is achieved by sequencing the bacterial genome at seven key loci, uncovering similar combinations of sequences associated with particular bacterial species. Spratt and his colleagues hope that once other researchers have used the site for identification, they will add their strains to the website. He said, "The beauty of the approach is that the database grows in size and utility as taxonomists add their isolates and associated molecular data to the database. Taxonomy therefore becomes electronic - with isolates assigned to species over the internet."

The authors point out that the assignment of strains to known species and the identification and acceptance of new species cannot be completely automated, as it requires the experience, knowledge and judgment of taxonomists. They say, "We hope that those interested in a particular

taxonomic group can share their experience and knowledge to provide a consensual approach to deciding whether new sequence clusters should be assigned as new species."

More information: Assigning strains to bacterial species via the internet, Cynthia J Bishop, David M Aanensen, Gregory E Jordan, Mogens Kilian, William P Hanage and Brian G Spratt, *BMC Biology* 2009, 7:3 doi:10.1186/1741-7007-7-3, www.biomedcentral.com/1741-7007/7/3

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