

## ***Mycobacterium nebraskense*, a Newly Recognized Slow Growing Opportunistic Pathogen**

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Researchers at the University of Nebraska Medical Center recently described a previously uncharacterized bacterial species isolated from multiple patients with pulmonary disease. The Judicial Commission of the International Committee on Systematic Bacteriology has officially validated the new species now named *Mycobacterium nebraskense* (ne.bras.ken'se, referring to the State of Nebraska). Distinct mycobacterial sequences characteristic of the 16S rRNA gene and the ITS-1 region target along with uniqueness of the mycolic acid profile and other phenotypic characteristics, confirmed that the isolate represented a novel *Mycobacterium* species. Phylogenetic analysis using the 16S rRNA gene sequences showed that *M. nebraskense* is closely related to other slow growing *Mycobacterium* species such as to *M. kansasii*, *M. scrofulaceium*, *M. malmoense*, and *M. avium*. The isolation of this new species from the sputum of 5 immunocompromised patients with respiratory symptoms suggests a likely causative association between infection with this pathogen and pulmonary disease. The type strain has been deposited into the American Type Culture Collection (ATCC BAA-837<sup>T</sup>) and into the German culture collection (DSM 44803<sup>T</sup>).

Questions about this new pathogen can be directed to Dr. Peter Iwen at 402-559-7774.

### **Reference**

**Mohamed, A. M., P. C. Iwen, S. Tarantolo, and S. H. Hinrichs.** 2004. *Mycobacterium nebraskense* sp. nov.: a new slow growing schotochromogenic *Mycobacterium* species. *Int. J. Syst. Evol. Microbiol.* **54:2057-2060.**