

Dr Aradaib is the scientific research director at the National Ribat University and a professor of molecular medicine at the University of Khartoum, Sudan. His research interests focus on the study of epizootics, including viral hemorrhagic fevers.

## References

1. Hoogstraal H. The epidemiology of tick-borne Crimean-Congo haemorrhagic fever in Asia, Europe and Africa. *J Med Entomol*. 1979;15:307–417.
2. Swanepoel R. Crimean-Congo haemorrhagic fever. In: Coetzer JA, Thomson GR, Tustin RC, editors. *Infectious diseases of livestock with special reference to southern Africa*. Cape Town (South Africa): Oxford University Press; 1994. p. 723–9.
3. Whitehouse CA. Crimean-Congo hemorrhagic fever. *Antiviral Res*. 2004;64:145–60.
4. Ergonul O. Crimean-Congo haemorrhagic fever. *Lancet Infect Dis*. 2006;6:203–14. DOI: 10.1016/S1473-3099(06)70435-2
5. Schmaljohn CS, Nichol ST. Bunyaviridae. In: Knipe DM, Howley PM, Griffin DE, Lamb RA, Martin MA, Roizman B, et al., editors. *Fields virology*, 5th ed. Philadelphia: Lippincott, Williams, and Wilkins; 2007. p. 1741–89.
6. Burney MI, Ghafoor A, Saleen M, Webb PA, Casals J. Nosocomial outbreak of viral hemorrhagic fever caused by Crimean hemorrhagic fever—Congo virus in Pakistan, January 1976. *Am J Trop Med Hyg*. 1980;29:941–7.
7. Schwarz TF, Nsanze H, Longson M, Nitschko H, Gilch S, Shurie H, et al. Polymerase chain reaction for diagnosis and identification of distinct variants of Crimean-Congo hemorrhagic fever virus in the United Arab Emirates. *Am J Trop Med Hyg*. 1996;55:190–6. Medline
8. Deyde VM, Khristova ML, Rollin PE, Ksiazek TG, Nichol ST. Crimean-Congo hemorrhagic fever virus genomics and global diversity. *J Virol*. 2006;80:8834–42. DOI: 10.1128/JVI.00752-06
9. Zwickl DJ. Genetic algorithm approaches for the phylogenetic analysis of large biological sequence datasets under the maximum-likelihood criterion [dissertation]. Austin (TX): The University of Texas; 2006.
10. Watts DM, Tigani AE, Botros BA, Salib AW, Olson JG, McCarthy M, et al. Arthropod-borne viral infections associated with a fever outbreak in the northern province of Sudan. *J Trop Med Hyg*. 1994;97:228–30.
11. McCarthy MC, Haberberger RL, Salib AW, Soliman BA, Tigani AE, Khalid OI, et al. Evaluation of arthropod-borne viruses and other infectious disease pathogens as the causes of febrile illnesses in the Khartoum Province of Sudan. *J Med Virol*. 1996;48:141–6. Medline DOI: 10.1002/(SICI)1096-9071(199602)48:2<141::AID-JMV4>3.0.CO;2-9
12. Morrill JC, Soliman AK, Imam IZ, Botros BA, Moussa MI, Watts DM. Serological evidence of Crimean-Congo haemorrhagic fever viral infection among camels imported into Egypt. *J Trop Med Hyg*. 1990;93:201–4.
13. Hassanein KM, el-Azazy A, Yousef HM. Detection of Crimean-Congo haemorrhagic fever virus antibodies in humans and imported livestock in Saudi Arabia. *Trans R Soc Trop Med Hyg*. 1997;91:536–7. DOI: 10.1016/S0035-9203(97)90014-6
14. Chamberlain J, Cook N, Lloyd G, Mioulet V, Tolley H, Hewson R. Co-evolutionary patterns of variation in small and large RNA segments of Crimean-Congo hemorrhagic fever virus. *J Gen Virol*. 2005;86:3337–41. DOI: 10.1099/vir.0.81213-0
15. Burt FJ, Paweska JT, Ashkettle B, Swanepoel R. Genetic relationship in southern African Crimean-Congo haemorrhagic fever virus isolates: evidence for occurrence of reassortment. *Epidemiol Infect*. 2009;137:1302–8. DOI: 10.1017/S0950268808001878

Address for correspondence: Stuart T. Nichol, Centers for Disease Control and Prevention, 1600 Clifton Rd NE, Mailstop G14, Atlanta, GA 30333, USA; email: snichol@cdc.gov

# etymologia

## *Tropheryma whipplei*

[tro-fer'ī-mə wi'-pəl-ē-ī]

The genus name of this gram-positive, rod-shaped, soil-dwelling bacterium was taken from Greek *trophe* (nourishment) and *eryma* (barrier) because malabsorption was a feature of the infection it caused. The species name honors George Hoyt Whipple (1878–1976), an American pathologist and medical educator, who, in 1907, first described the clinical syndrome later known as Whipple's disease. In 1991, when sections of the genome were sequenced, the organism was named *T. whippelii*; the spelling was corrected in 2001.

**Source:** La Scola B, Fenollar F, Fournier P-E, Altwegg M, Mallet M-N, Raoult D. Description of *Tropheryma whipplei* gen. nov., sp. nov., the Whipple's disease bacillus. *Int J Syst Evol Microbiol*. 2001;51:1471–9.

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