

Microbiology  
A Very Short Introduction  
By Nicholas P. Money

Questions for Thought and Discussion

- When did 'we' become aware of the existence of microorganisms?
- What are the three primary groups of organisms?
- What are some of the differences between prokaryotes and eukaryotes?
- What do we learn from molecular phylogenetic analysis?
- What are cyanobacteria?
- How do bacteria and archaea swim?
- What are some of the supergroups of eukaryotic microorganisms?
- What is an opisthokont? (Begin by looking in the mirror and then think about your relatives.)
- Why is it impossible to see viruses with a light microscope?
- Are viruses living organisms?
- What are some of the mechanisms that microbes use to power themselves?
- How do bacteria make proteins?
- How do viruses make copies of themselves?
- What is a bacteriophage?
- How do microorganisms in the human gut support our health?
- What is an opportunistic infection?
- Why are mycorrhizas important?
- What are some of the apparently hostile environments in which some microorganisms thrive?
- What is known about the origins of microorganisms?
- Why should we be concerned about the widespread use of antibiotics in agriculture?
- What is meant by the closing sentence of the book: 'The microbes are everywhere and will outlive us by an eternity'?

**Other Books by the Author**

*The Amoeba in the Room: Lives of the Microbes* (OUP 2014)

*Mr Bloomfield's Orchard: The Mysterious World of Mushrooms, Molds and Mycologists*  
(OUP 2004)

*Carpet Monsters and Killer Spores: A Natural History of Toxic Mold* (OUP 2004)

*Mushroom* (OUP 2012)

**Further Reading**

S. G. B. Amyes, *Bacteria: A Very Short Introduction* (Oxford University Press, 2011)

D. H. Crawford, *Viruses: A Very Short Introduction* (Oxford University Press, 2011)

M. J. Blaser, *Missing Microbes: How the Overuse of Antibiotics is Fueling our Modern Plagues* (New York: Henry Holt, 2014)

F. M. Harold, *The Vital Force: A Study of Bioenergetics* (New York: W. H. Freeman, 1986)

M. T. Madigan, J. M. Martinko, D. Stahl, D. P. Clark, *Brock Biology of Microorganisms*, 13<sup>th</sup> edition (Benjamin Cummings, 2010)

L. M. Sompayrac, *How the Immune System Works*, 4<sup>th</sup> edition (Hoboken, NJ: Wiley-Blackwell, 2012)