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THE COVER

A colorized transmission electron micrograph captures Stenotromonas malphilia, a mobile bacterium that thrives in wet and moist environments such as soil and water The bacterium frequently colonizes fluids used in hospitals, contaminating catheters and breathing tubes and causing serious infections in patients with weakened immune systems, S maltophilia is one of a growing number of microbes that have developed resistance to multiple antibiotics. In "How to Fight Back Against Antibiotics Resistance" (pages 42-51), authors Gautam Dantas and Morten Sommer describe how genes for resistance evolve and get passed between different bacteria and environments. Understanding the factors that influence those processes could extend the life of current drugs and point toward new disease-fighting strategies. (Photograph from the Centre for Infections/Public Health England/Science Photo Library.)