REPROGRAMMING THE HOST

Mycobacterium leprae, which causes leprosy, takes cell reprogramming to an extreme by reverting its Schwann cell host into a stem cell–like state ❶. These cells can then redifferentiate into muscle cells, for example, perhaps spreading the bacterium to other tissues ❷. The reprogrammed cells can also pass the infection on to macrophages, which then form structures known as granulomas before going on to spread the infection themselves ❸.