



**FIGURE 20.17.** The rock–scissors–paper game in a bacterial population. (A) Abundance of three types of *Escherichia coli*, grown in a stirred flask: green, resistant; red, bacteriocin-producing; blue, sensitive. Dashed lines indicate that the type is undetectable. (B) When the bacteria are propagated on the surface of an agar plate, patches of the three types can coexist. The graphs show the average frequency over the whole plate. (C) An example showing how patches move over time. The letters show the initial distribution of the three types. The pictures on the left show the plates at days 3, 5, and 7: The patches inhabited by C cells are less dense and so can be distinguished by eye. The sketches on the right show how the boundaries between the three types move: C advances at the expense of S (yellow lines), but R advances at the expense of C (pink lines).

20.17A–C, modified from Kerr B. et al., *Nature* **418**: 171–174, © 2002 Macmillan, [www.nature.com](http://www.nature.com)