



FIGURE 2.30. The Pajamo (Pardee, Jacob, Monod) experiment. (A) Wild-type *Escherichia coli* (I^+ , Z^+) were mixed with bacteria that lacked the normal β -galactosidase enzyme (Z^-) and that also carried a constitutive mutation that caused expression of the *lac* operon even in the absence of lactose (termed I^- because they were not inducible by lactose). The wild-type bacteria came from the *Hfr* strain and so acted as males, donating genes to the double-mutant strain. (B) A few minutes after mating, β -galactosidase began to be produced at a high rate, even in the absence of lactose. However, enzyme production later declined.

2.30A, adapted from Judson H.F., *The Eighth Day of Creation; Makers of the Revolution in Biology*, expanded edition, pp. 372, 392, CSHLP, © 1996 by Horace Freeland Judson; 2.30B, adapted from Pardee A.B. et al., *J. Mol. Biol.* 1: 165–178, © 1959 Academic Press