



**Figure 1.** The ascent of pBR322. R7268 was isolated in London in 1963 (Datta and Kontomichalou 1965) and later renamed R1. (1) A variant, R1*drd*19, which was derepressed for mating transfer, was isolated (Meynell and Datta 1967). (2) The Ap transposon, Tn3, from this plasmid was transposed onto pMB1 to form pMB3 (Betlach et al. 1976). (3) This plasmid was reduced in size by *Eco*RI\* rearrangement to form a tiny plasmid pMB8 (Rodriguez et al. 1976) which carries only colicin immunity. (4) *Eco*RI\* fragments from pSC101 (Cohen and Chang 1977) were combined with pMB8 opened at its unique *Eco*RI site and the resulting chimeric molecule rearranged by *Eco*RI\* activity to generate pMB9, a vector that has seen much service in the clone wars (Boyer et al. 1977). (5) In a separate event, the Tn3 of R1*drd*19 was hopped to ColE1 to form pSF2124 (So et al. 1976). (6) The Tn3 element was then transposed to pMB9 to form pBR312. (7) *Eco*RI\* rearrangement of pBR312 led to the formation of pBR313 (Bolivar et al. 1977a), from which (8) two separate fragments were isolated and ligated together to form pBR322 (Bolivar et al. 1977c). During this series of constructions, R1 and ColE1 served only as carriers for Tn3. Material originally in pMB1 and pSC101 ended up in pBR322.