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**COVER** The discovery of the gene that is defective in the childhood disease cystic fibrosis has generated hope and excitement in the scientific and medical communities. See page 1059. The colored bars represent chromosomes from different patients with cystic fibrosis. Original data are from B. Kerem *et al.*, Table 3, page 1076. [Photograph by Carol Clayton of a child from the Cystic Fibrosis Foundation]

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