The protective action of the wild-type p53 gene helps to suppress tumors in humans. However, the p53 gene is the most commonly mutated gene in human cancer, and these mutations may actively promote tumor growth. The purple dots indicate some of the many tumor types that may carry p53 mutations, including brain, esophagus, lung, breast, liver, prostate, and colon. See Editorial, page 1953, Molecule of the Year article, page 1958, and Perspective, page 1980. [Illustration: K. Sutfill and C. Faber Smith]