

# New Understanding of the Chemical Basis of Heredity

In the past two decades biologists and biochemists have convincingly demonstrated that the genetic substance of all living creatures, from viruses to man, is nucleic acid—DNA (deoxyribonucleic acid)—and that the instructions in DNA are transmitted by messenger RNA (ribonucleic acid). The detailed structure of these substances and the manner of their function and reproduction are the primary concern of workers in the field of molecular biology today, a field in which recent progress has been particularly dramatic. On the following pages—three recent developments in which Caltech scientists have played a prominent part.