



**FIGURE 2.15.** Oswald Avery and his colleagues used transformation between the smooth and rough properties of *Streptococcus pneumoniae* colonies, as well as enzymes that destroy polysaccharides, lipids, DNA, protein, and RNA, to determine the nature of the transforming principle. Transforming activity was abolished by pretreatment with an extract of dog intestinal mucosa that had been shown to destroy DNA. Thus, DNA was the genetic material, a result that was viewed with skepticism by many in the field at the time. Previous to these experiments, most scientists believed that genes were made up of protein.