

COOLEY'S ANEMIA

SEVENTH SYMPOSIUM



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COVER ART: Expression of globin genes. The flow of genetic information from the DNA sequence to the final protein product involves several discrete steps. First, the coding strand is copied into RNA by a process called transcription. Processing of the RNA species includes modifications of the 5' end, referred to as capping, addition of adenosines on the 3' end, and splicing to remove intron sequences. The final mRNA species is transported to the cytoplasm where it is translated into protein. The α - and β -like chains assemble spontaneously to form hemoglobin molecules. Mutations that cause thalassemia may interfere with any one of these major processes, namely transcription, processing, transport, or translation. (From National Heart, Lung, and Blood Institute/NIH report, *Cooley's Anemia: Progress in Biology and Medicine - 1995*) **Spacecraft photograph** Most of Africa and portions of Europe and Asia can be seen in this spectacular photograph taken from the Apollo II spacecraft during its translunar coast toward the moon. Apollo II, with Astronauts Neil A. Armstrong, Michael Collins, and Edwin E. Aldrin, Jr. aboard, was already 98,000 nautical miles from Earth when this picture was taken (courtesy of NASA).

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COOLEY'S ANEMIA Seventh Symposium^a

Editor and Symposium Chairman
ALAN R. COHEN

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