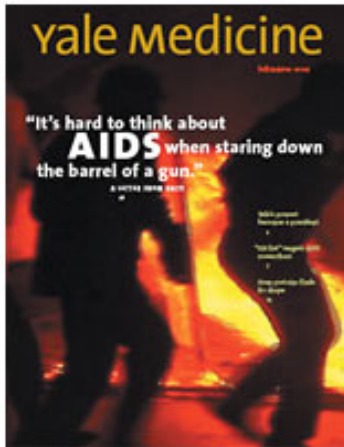


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Et Cetera

Picturing an enzymatic RNA

More than 20 years ago scientists discovered that RNA, and not just proteins, could act like an enzyme. Now Yale researchers have obtained the first X-ray crystal structure of this type of enzymatic RNA. The image caught an RNA molecule as it spliced together two exons, the parts of a gene that code for proteins. Also visible in the image were a full-length noncoding intron and metal ions bound in the molecule's active site.

The RNA acts like an enzyme so it can overcome an inherent hindrance to protein synthesis—the intron that separates the exons. With the help of the metal ions, the RNA connects the exons and removes the intron sequence.

"This is the first RNA splicing complex to be visualized in molecular detail," said Scott A. Strobel, Ph.D., professor of molecular biophysics and biochemistry and chemistry, and principal investigator of the study published in the journal *Nature* in June.

—K.N.