

# School of Life Sciences Special Lecture



**Nobel Prize winner**

**Sidney Altman**

Professor, School of Life Sciences and Nobel Laureate in chemistry

## **Modified nucleotides and RNase P involved in gene suppression and evolution of RNase P**

This lecture offers a short discussion of modified nucleotides followed by a description of the structure of RNA components of RNase P from various sources. Some comments will be made about the evolution of RNase P and the role of this enzyme in human disease.

Sidney Altman shared the 1989 Nobel Prize in chemistry with Thomas R. Cech for their discoveries, independent of each other, that RNA actively aids chemical reactions in cells. A professor in the School of Life Sciences at ASU, his research is concerned with the function and structure of ribonuclease P in both bacteria and human cells. His group is also exploring the use of RNase P and so-called external guide sequences to activate various genes in bacteria and mammalian cells. This work has the potential to help address the ever-increasing resistance of micro-organisms to conventional antibiotics. Altman is a fellow of the American Academy of Arts and Sciences and National Academy of Sciences. He received his BS in physics from the Massachusetts Institute of Technology and his PhD in biophysics from the University of Colorado at Boulder.

**March 4**

**1:45 p.m.**

**LSE 104**

**ASU** School of  
Life Sciences  
Arizona State University