

Biomedicine Discovery Lecture

CRAWLING OUT OF THE RNA WORLD: From catalytic RNA to telomerase, a catalytic RNP

Presented by Tom Cech, Distinguished Professor and Nobel Laureate

Wednesday 17 February 2016, 1–2pm
South 1 Lecture Theatre, 43 Rainforest Walk
Monash University, Clayton Campusmonash.edu/discovery-institute

In all of life on Earth, information flows from DNA to RNA to Protein. Thus, RNA has a role as a ‘message,’ transmitting the information encoded in our chromosomal DNA.

More recently, the biological importance of noncoding RNA has been revealed. RNA molecules can have active roles in biology, even acting as enzymes. I will describe the events that led to the discovery of the first catalytic RNA, or ribozyme, and subsequent work that revealed the structures and functions of these remarkable molecules. The finding that RNA could be a biocatalyst fueled speculation about a primordial RNA World, where RNA served as both information (genotype) and function (phenotype). I will then describe recent work on the structure and function of telomerase, the RNP (ribonucleoprotein) enzyme that synthesizes new DNA at chromosome ends.



Speaker

Professor Tom Cech*Distinguished Professor, University of Colorado Boulder**Director, University of Colorado BioFrontiers Institute**Investigator, HHMI**Nobel Laureate (Chemistry, 1989)*

Event details

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1–2pm followed by refreshmentsSouth 1 Lecture Theatre
43 Rainforest Walk
Monash University
Clayton Campus

For more information:

[monash.edu/
discovery-institute](http://monash.edu/discovery-institute)