Thomas R. Cech, Ph.D.

Dr. Thomas Cech received a B.A. in Chemistry from Grinnell College in Iowa, a Ph.D. in Chemistry from the University of California, Berkeley and then did postdoctoral work in the Department of Biology at the Massachusetts Institute of Technology in Cambridge, Massachusetts. He then joined the faculty at the University of Colorado, Boulder where he became a Howard Hughes Medical Institute Investigator.

Dr. Cech's work has focused on the study of RNA in several different biological contexts. His group established that an RNA molecule can promote the breakage and joining of chemical bonds. This landmark work established that RNAs can act as enzymes, often called ribozymes, and was the first exception to the then accepted dogma that only proteins can act as enzymes. Dr. Cech has also significantly contributed to our understanding of the roles of RNA in the critical process of chromosome maintenance.

An important consequence of Dr. Cech's work has been to provide deep insights into the RNA World and provide an indication that RNA transactions may play critical roles in the origin of life by actually being able to act both as an information carrier and as a catalyst.

Dr. Cech has received numerous national and international awards including the Lasker Basic Medical Research Award, a lifetime Professorship by the American Cancer Society, the Nobel Prize in Chemistry and the National Medal of Science. He also has a keen interest in science education and has participated in a number of events for K-12 and undergraduates, as well as for the public.

In addition to his continuing research on RNA at the University of Colorado, Dr. Cech is also the President of the Howard Hughes Medical Institute in Bethesda, Maryland.