RNA WorldAugust 7, 2015

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1 Origination of the RNA world idea

For a while people thought that RNA doesn't have enzymatic activity, and proteins cannot store genetic information. Because of that people thought life had to originate with both polymers simultaneously. One responsible for information and another for function. However at some point people discovered that RNA can have enzymatic activity:

1. RNA molecule in E. coli: ribonuclease-P cuts phosphodiester bonds during the maturation of the transfer RNA molecule[1, 2]

References

- [1] Cecilia Guerrier-Takada, Katheleen Gardiner, Terry Marsh, Norman Pace, and Sidney Altman. The RNA moiety of ribonuclease P is the catalytic subunit of the enzyme. *Cell*, 35(3):849–857, December 1983.
- [2] C Guerrier-Takada and S Altman. Catalytic activity of an RNA molecule prepared by transcription in vitro. *Science*, 223(4633):285–286, January 1984.