The Origin of Life: Did It All Start In a Warm Little Pond?

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https://ucmexus.ucr.edu/spotlight/lazcano_araujo.html

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Darwin's ideas provided an evolutionary framework that led to the idea that the first organisms were the result of a transformation of lifeless matter. In the 1920s A. I. Oparin, a young biochemist, suggested that the first living things were bacteria that had formed in an environment rich in abiotically synthesized organic compounds on the early Earth. The so-called heterotrophic theory was developed in the midst of political debates of surprising intensity and extraordinary scientific advances, including the famous 1953 Miller-Urey experiment, which demonstrated the ease with which organic compounds could be synthesized under putative primitive reducing conditions. It is often forgotten that Miller published his results a few weeks after Watson and Crick published the double-helix model of DNA, and for several decades the unraveling of the details of DNA replication & protein biosynthesis defined some of the basic issues in the study of the origin of life. Although the debates have not ceased and the origins of life remains an open issue, nowadays we have a coherent (but not seamless) evolutionary narrative where disciplines like molecular biology and the study of the properties of RNA molecules converge with planetology, geochemistry, organic chemistry, and cell biology.