

J. Lederberg

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CARNEGIE INSTITUTION OF WASHINGTON
GENETICS RESEARCH UNIT
COLD SPRING HARBOR, NEW YORK 11724

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Dear Josh

Your 1962 definition of plasmid is usually interpreted to include the F agent. Some properties of F might suggest a sort of sex chromosome. Do you ever consider alternative definitions of plasmid? To exclude migratory chromosomes? Or would you care to try?

Al
Lederberg

Hi Al--

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How do you define a chromosome? When I wrote that review, I had in mind a regular mechanism of segregation (e.g. mitosis) to define the chromosome. This does break down in the light of present knowledge of prokaryotes. F is a shadowy intermediate. Apart from its potentiality for integration (episome), you can choose to look at it as a chromosome or as a plasmid. We will face the same problem with mitochondrial DNA too. My main purpose in defining 'plasmid' was to stress the ambiguity of plasmid/virus. I think I would still leave it at the original definition of "extrachromosomal <gene(s)>".