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TELEGRAMS: "BACTERIUM", B'HAM

From:—

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BIRMINGHAM, 15.

1/Sept/54

Dear Lederberg,

Thank you for your letter renewing permission to use your picture. The caption will be:

"(1) Cells of *Bacterium coli* known to be genetically diploid. (By permission of Dr. J. Lederberg)."

I trust this will be O.K.

And I entirely understand your misgivings lest your views should be misunderstood. Set your mind at rest!

Naturally, I shall discuss the appearance of various types of bacterial nucleus believed to be diploid or polyploid. But I don't anticipate any difficulty by people attributing my views to anybody but myself.

I am exceedingly glad to know that I have convinced you of the correctness of my interpretation of those damn-silly "mitotic spindles", but don't quite get the meaning of the last paragraph. Is the "one supporter" (your quotes and italics) mine or Delamater's? And what is wrong with the "rationale of mitotic division or its equivalent" (my quotes) which I have been

backing for years — and which is accepted by 99% of cytologists?

The work of Jinks, Cavalli and Co. seems to call for the same solitary, reductionally dividing chromosome which is so obvious cytologically. And in the programme for the next meeting of the Soc. Gen. Microbiol. I observe: "R.C. Cloves and D. Rowley (Wright-Fleming Inst.) Evidence for the unity of two of the postulated chromosomes in E. coli, K12."

I don't quite know, as I say, whether you are still nostalgically hoping for cytological evidence of a multiple-chromosome-equational mitosis in bacteria. But if so, why?

Where alternative genetical theories

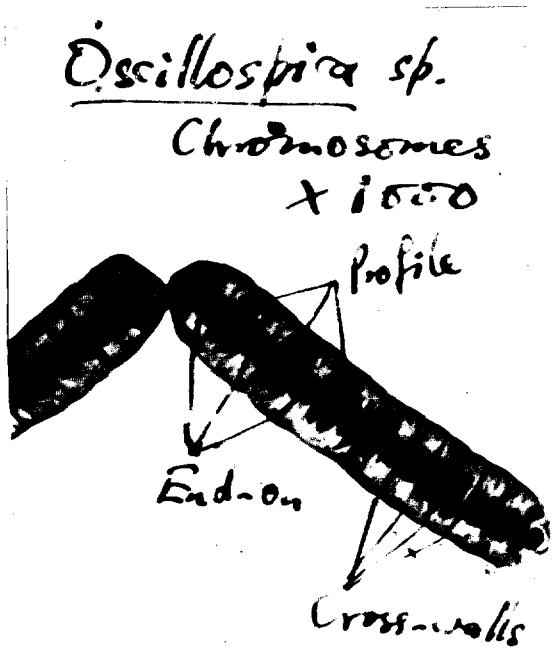
are available, some of which exactly fit the cytological evidence (as agreed by an overwhelming majority of observers), whereas others have no cytological support at all —— surely the former must be accorded weight!

As one frank and outspoken man to another, you'll forgive me for being so frank in this case also.

I enclose a print of that genial giant Oscillospira (now a proved bacterium). What other possible interpretation can be put on these structures? They seem absolutely indisputable examples of the transverse rods which Robinow figured so clearly ten years ago or more.

Best wishes, sincerely,

Kenneth Bisset


Oscillospira sp.
Chromosomes
x 1000
Profile
End-on
Cross-walls