Personal Memo from
JOSHUA LEDERBERG

Tom Brock
U-Wis.

Dear Tom!

JAN -8 1989

Contribution of pneumococcus to bacterial genetics

of course Avery et al. 1944 first focussed attention on DNA. So it had everything to do with ~~bacterial genetics~~ molecular genetics.

But pneumococcus was too difficult to work with * That motivated search for other systems - esp. Hemophilus + Bacillus, eventually E. coli.

But don't overlook:

Hotchkiss + Marmur ca. 1951
linkage in transformation
(followed by Nester - Canesan - JL 1963
PNAS 49: 61-68 in B. subtilis)
that associates linkage with covalent coupling on DNA molecules.

J.

* and so there has been no growing school of pn. research as there has for other systems used in bacterial genetics.

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[x]... cr→ ✓ 1/9/89 cr

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Bacterial nuclei.

P.S.

There is no logical connection between models of bacterial conjugation and whether there is an organized nucleus.

With a single chromosome the only consideration would be a nuclear membrane, and this disappears during mitosis/meiosis in any event.

(certainly my thinking!)

My own writings were quite skeptical of the mitotic figures claimed by Bisset or Delamater. But I could not disprove mitosis with light microscopy - esp. if one postulated a single long floppy chromosome, barely resolvable.

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