Conjugal plasmid transfer by a chromosome segregation mechanism

Jutta Vogelmann, Moritz Ammelburg, Constanze Finger, Jamil Guezguez, Dirk Linke, Matthias Fltenmeyer, York-Dieter Stierhof, Wolfgang Wohlleben, Guenther Muth

Corresponding author: Guenther Muth, Universität Tübingen

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(Note: With the exception of the correction of typographical or spelling errors that could be a source of ambiguity, letters and reports are not edited. The original formatting of letters and referee reports may not be reflected in this compilation.)

1st Editorial Decision 07 March 2011

Thank you for transferring your manuscript on conjugational plasmid transfer in Streptomyces to The EMBO Journal. I have now carefully read the study and considered it further in light of the directly transferred referee reports; furthermore, an expert member of our Editorial Advisory Board has also looked over the study and the previous comments. As a result, I am happy to inform you that we would like to offer publication of the paper in The EMBO Journal, pending some minor revisions.

In this respect, the main point would be to incorporate the remarks from the very last of the transferred referee reports, regarding a better documentation of the planar lipid bilayer experiments to allow judging of the 'ease or difficulty of obtaining typical channel records shown'; likewise it would be important to discuss more cautiously what these measurements can and cannot contribute to the overall interpretations, also in light of the still ongoing debate around SpoIIIE and FtsK mechanisms.

At this stage, I would also like to ask you to reformat the manuscript according to EMBO J guidelines, including the referencing style. Please also capitalize on our more extended article format to incorporate more of the directly relevant supplementary data into the main manuscript and main figures, and possibly also expand a bit more on the introduction and discussion sections. Finally, I am wondering whether you might be able to provide an alternative, more explicit manuscript title that would capture a bit more of the paper's essence or main finding - the way it currently reads, I am not sure it gives a very good indication of what exactly the paper is about.

Once we will have received the final version incorporating, we should be able to swiftly proceed.
with acceptance and production of the study. Should you have any further questions beforehand, please do not hesitate to get back to me.

Yours sincerely,

Editor
The EMBO Journal

1st Revision - authors' response 23 March 2011

Thank you very much for the positive decision on our manuscript. Please find enclosed the revised manuscript of Vogelmann et al. In revising the manuscript we have carefully followed your instructions. In particular, we:

- added a paragraph in section "TraB formes pores in lipid bilayers in vitro" describing the single channel recordings together with all control experiments and their outcome, according to the remarks of the referees commenting on the lipid bilayer experiments.
- changed the title from "Conjugal plasmid transfer by a chromosome segregation mechanism" to "Conjugal plasmid transfer in Streptomyces resembles bacterial chromosome segregation by FtsK/SpoIIIIE"
- adapted the manuscript to the more extended EMBO J article format
  - by adding a paragraph Streptomyces TraB proteins closely resemble septal DNA-translocators of the FtsK/SpoIIIIE family
  - by incorporating supplementary figures S2b, S3 and S5 into the main manuscript
  - and by reporting experimental data from supplementary figure S6 in section Helix 3 of the TraB wHTH motif determines sequence-specific DNA recognition.
- expanded the Introduction by adding a paragraph describing the mechanism of DNA translocation during bacterial conjugation
- discussed more comprehensively the mechanistic differences in DNA-translocation via type IV secretion, Streptomyces conjugal DNA-transfer and FtsK/SpoIIIIE mediated DNA segregation during cell division and sporulation.

In addition, we reformatted the manuscript (in particular References) to meet the EMBO Journal guidelines.

We hope that the revised version of the manuscript now fulfils your expectations and that the paper is acceptable for publication in EMBO Journal.

We thank you for your constructive comments and appreciate the handling of our manuscript by you as an editor.

Acceptance letter 25 March 2011

Thank you for submitting your revised manuscript for our consideration. I have now had a chance to look through it and to assess the changes, and I have also considered the new title, which I find much improved. At this stage, I am happy to inform you that there are no further objections towards publication in The EMBO Journal!

You shall receive a formal letter of acceptance shortly.

Yours sincerely,

Editor
The EMBO Journal