

Peer-Review Record:

Looked at Life from Both Sides Now

Jillian E. Smith, Allisandra K. Mowles, Anil K. Mehta and David G. Lynn

Life 2014, 4, 887-902, doi:10.3390/life4040887

Reviewer 1: Anonymous*Reviewer 2*: Leslie S. Smith*Editor*: Niles Lehman (Guest Editor of Special Issue "The Origins and Early Evolution of RNA")

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First Round of Evaluation

Round 1: Reviewer 1 Report and Author Response

Here, we have an excellent review that perfectly fits into the Special Issue, "The Origins and Early Evolution of RNA," in the journal, Life. I had found this article very thorough and it contains a very appropriate selection of bibliographical references that shed light on the several points related to protein/nucleic acid biopolymer mutualism; these points are described in the main text. I did not find major written errors in the main text. I only found that the figure 1 caption text hypens (-) should be included in "beta stands" and in the "beta sheets" pairs in Lines 2 and 3, respectively. Also, the author must check all journal names abbreviations in the References and Notes section. For instance in:

- #23 Journal of Insect Physiology should be J. Insect Physiol.;
- #28 and #39 Nature reviews. Genetics should be Nature Rev. Genet.;
- #34 Nucleic Acids Research should be Nucleic Acids Res.;
- #40 Philosophical Transactions of the Royal Society B should be Phil. Trans. R. Soc. B;
- #43 Organic & Biomolecular Chemistry should be Org. Biomol. Chem.; and some more journal names that are not abbreviated.

Greetings.

Response: These mistakes were found by the reviewer and corrected.

- #23 Journal of Insect Physiology should be J. Insect Physiol.;
- #28 and #39 Nature reviews. Genetics should be Nature Rev. Genet.;
- #34 Nucleic Acids Research should be Nucleic Acids Res.;
- #40 Philosophical Transactions of the Royal Society B should be Phil. Trans. R. Soc. B;
- #43 Organic & Biomolecular Chemistry should be Org. Biomol. Chem.

I also updated the following journal to the ISO guidelines:

- Proceedings of the National Academies of Science to Proc. Natl. Acad. Sci. USA
- Accounts of Chemical Research to Accounts Chem. Res.
- Current Protein and Peptide Science to Curr. Protein Pept. Sci.
- Chemical Society Reviews to Chem. Soc. Rev.
- Cold Spring Harbor Perspectives in Biology to Cold Spring Harb. Perspect. Biol.
- Journal of the American Chemical Society to J. Am. Chem. Soc.
- Journal of Material Chemistry C to J. Mater. Chem. C
- Origins of Life and Evolution of the Biosphere to Orig. Life Evol. Biosph.
- Acta Astronautica to Acta Astronaut.

Information to cite #88

Journal: Comptes Rendus des Seances de la Societe de Biologie et de ses Filiales (French) Title: The optic properties of amyloid Year: 1927 Authors: Divry, P., Florkin, M.

Round 1: Reviewer 2 Report and Author Response

This is a review, discussing the area of what makes living systems. This is of growing interest, specifically from the computation side (which I know about), and from the chemistry side (which I do not know about). It is a useful review, building on many papers, but in particular, the work of Root-Bernstein, and earlier papers (with some of the authors in common with this) on Goodwin *et al.* 2012. It is well written, and I can more or less understand it, but I lack the detailed chemistry/biochemistry vocabulary to really get a grip on this paper.

The second half of the last paragraph sums up really well where this work is heading: and that's surely of interest to readers of a journal called "Life"!

Response: Thanks.

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