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Senior Editors
eLife

Dear Editors

We would like to submit our manuscript “Whole-body connectome of a segmented annelid larva” for peer review and curation to eLife.

In the paper, we describe the cell-type annotation and connectome analysis of an entire segmented three-day-old larva of the marine annelid *Platynereis dumerilii*. The analysis is based on a previously reported volume EM dataset from which we have already reported several reconstructed circuits (PMID: 26061864, 36537659, 29199953, 30547885, 29809157, 26670546, 28508746). This work reports the reconstruction of all neuronal and non-neuronal cells including many newly discovered cell types and circuits e.g. the mushroom bodies and also the global analysis of the connectome and intersegmental connectivity.

The [preprint](#) has been posted on biorxiv on 18 March 2024.

This preprint is completely reworked and expanded relative to a previous [preliminary version from 2020](#)

This early preprint has not and will not be published in a journal and for technical reasons was not linked to the new connectome manuscript (the changes are too large to justify treating the new paper as a new version).

For peer review, we have made all the [high-resolution figures](#) (as pdf or eps) available. Unfortunately, we could not upload all files as a single pdf due to size constraints and the eLife submission site did not manage to convert all files into a single pdf (with over 50 high-resolution figures).

We believe that eLife is the best venue for this work and that the paper will be of general interest in the neural circuits field and will be an important resource for the *Platynereis* community.

As potential reviewers, we would like to suggest:

Karen Mesce, University of Minnesota (mesce001@umn.edu)

Paul Katz, University of Massachusetts Amherst (pkatz@umass.edu)

Ronald Calabrese, Emory University (ronald.calabrese@emory.edu)

Ian Meinertzhagen, Dalhousie University (iam@dal.ca)

Sincerely,

Gáspár Jékely