

ERRATUM

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Erratum to: A new transcriptome and transcriptome profiling of adult and larval tissue in the box jellyfish *Alatina alata*: an emerging model for studying venom, vision and sex

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Erratum

After publication of our article [1], it was brought to our attention by a colleague that in describing the “7 transmembrane receptor (rhodopsin family)” G protein-coupled receptor (GPCR) transcripts of *Alatina alata* as “opsins” in Fig. 11 and the results and discussion sections of the paper, we misrepresented the data, as Opsins are just one subfamily of rhodopsin family GPCRs. We regret that this important detail was overlooked prior to publication, and we apologize for any inconvenience caused by this error.

More stringent analysis of the *A. alata* “7 transmembrane receptor (rhodopsin family)” GPCRs revealed only two likely opsins (comp71410 and comp74136) based on the alignment of their conserved lysine (K), for retinal binding, with that of the bovine rhodopsin reference protein. Therefore, all mention of *A. alata* “opsin” expression in the original article should be interpreted as “rhodopsin family GPCR” expression, except when referencing the two putative opsins: comp71410 (exclusively expressed in the rhopalium) and comp74136 (most abundant in the rhopalium, but also expressed in extraocular medusa tissues and planulae). In light of these new findings, Fig. 11 “cnidarian opsin gene tree” and all related references in our original article should be disregarded. Figure 11 is replaced here

with Fig. 11b, a corrected gene tree reconstructed using only cnidarian opsin proteins from NCBI Genbank and the two putative *A. alata* opsin ORFs. The gene tree reconstructions (.tre file) and corresponding alignment are available at: https://figshare.com/articles/Supplemental_Information_for_A_new_transcriptome_and_transcriptome_profiling_of_adult_and_larval_tissue_in_the_box_jellyfish_Alatina_alata_an_emerging_model_for_studying_venom_vision_and_sex/3471425.

The discovery that *A. alata* opsin diversity is less broad than previously suggested does not impact the overall conclusions of our paper regarding opsin expression. Our updated findings still suggest that *A. alata* opsin is most abundant in the rhopalium, but also expressed in planulae, which have eyes spots, as well as in extra-ocular tissue types in the medusa, suggesting the presence of yet undescribed photoreceptors. Additional non-opsin rhodopsin family GPCRs ($n = 31$), whose specific identities await further analyses, are expressed in both the *A. alata* medusa samples and planulae. Previously we touched on the apparent diversity of *A. alata* rhodopsin family GPCRs, based on the fact that some of our BLAST hits for those sequences corresponded to non-opsin GPCRs (e.g., dopamine receptor, prostaglandin E2 receptor, melanocyte-stimulating hormone receptor), while others corresponded to various opsin types (e.g., lens eye opsin, peropsin, melanopsin).

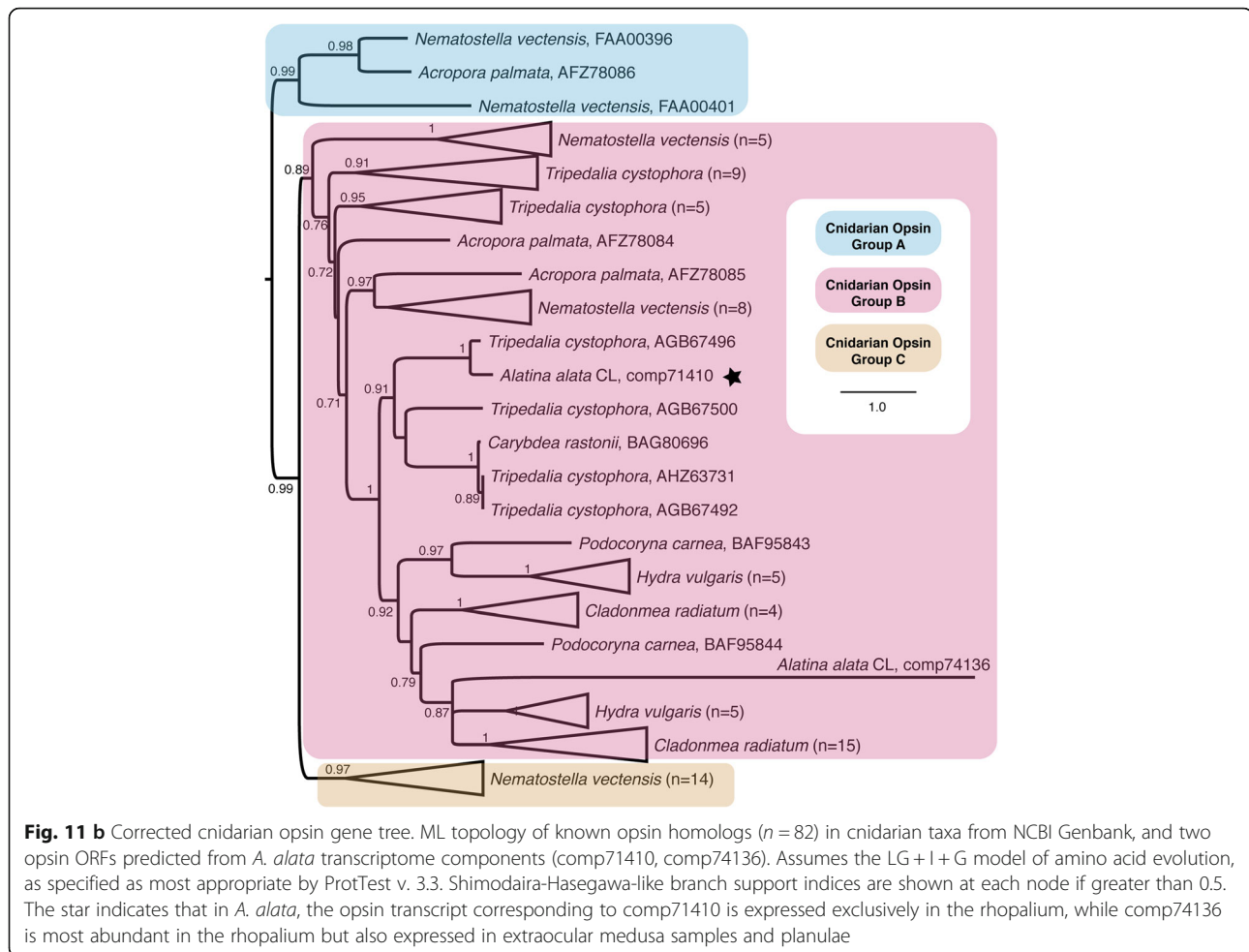
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