

Performing your original search, **A puzzling Metazoan Body Plan, Editor's Choice Section Science**, in *Science* will retrieve [0 results](#).

Science 14 July 2000:
Vol. 289, no. 5477, p. 217
DOI: 10.1126/science.289.5477.217c

EDITORS' CHOICE: HIGHLIGHTS OF THE RECENT LITERATURE

The myzostomids are an enigmatic and anatomically bizarre group of marine animals, found in symbiotic or parasitic association with echinoderms from Ordovician to modern times. Their unusual acoelomate, incompletely segmented body plan--the result of their long history of obligate association--has caused two centuries of dispute amongst systematists. Myzostomids have been considered as annelids, sometimes within the polychaetes, sometimes not. More recently, workers have classed them as a separate phylum allied to the annelids.

Eeckhart *et al.* have acquired molecular data from two components of the protein synthetic machinery, the small ribosomal subunit RNA gene (SSU) and the elongation factor-1a gene, and throw new light on the phylogenetic relationships of the myzostomids. They confirm that the myzostomids are not nested within the annelids. More surprisingly, they find that the myzostomids have no close links to the annelids at all; instead, they are more closely allied to the flatworms.

This result suggests that the key morphological features--segmentation, coeloms, etc.--used to classify the animal kingdom might not be as conservative as hitherto thought. If, as has apparently happened in the myzostomids, these features can be independently gained or lost during the course of evolution, our view of the evolution of body plans and the relationships of the animal phyla may become more complicated. -- AMS

Proc. R. Soc. Lond. B 267, 1383 (2000).

ADVERTISEMENT

Call for Papers
Submit your work
to STM today!



ADVERTISEMENT

Science Careers

is the forum that
answers
questions.



» Relevant
Career Topics

» Timely Advice
& Answers

» Community,
Connections,
& More

Science Careers

From the journal Science AAAS

ScienceCareers.org

[To Advertise](#) [Find Products](#)

Science. ISSN 0036-8075 (print), 1095-9203 (online)

[News](#) | [Science Journals](#) | [Careers](#) | [Blogs and Communities](#) | [Multimedia](#) | [Collections](#) | [Help](#) | [Site Map](#) | [RSS](#)

[Subscribe](#) | [Feedback](#) | [Privacy / Legal](#) | [About Us](#) | [Advertise With Us](#) | [Contact Us](#)

© 2000 American Association for the Advancement of Science. All Rights Reserved.
AAAS is a partner of [HINARI](#), [AGORA](#), [PatientInform](#), [CrossRef](#), and [COUNTER](#).