## **Instructions to Authors**

Zygote will publish original papers on all aspects of early development from gametogenesis to gastrulation. Studies on plants, invertebrates, lower vertebrates, mammals and humans at the molecular and cellular levels will be accepted. Topics include gametogenesis, fertilisation, sperm-egg interaction, activation of gametes, polarity in oocytes and zygotes, cell cycle control, cleavage, cell-cell interactions, and the generation of primary cell lineages. Review articles, short communications and News and Views Commentaries are also welcomed.

To submit a manuscript, send three complete copies, including figures and illustrations to Brian Dale, Editor-in-Chief, Zygote, Stazione Zoologica, 'Anton Dohrn', Villa Comunale, Naples 80121, Italy. Telephone 39 81 5833233, Fax 39 81 583 3260.

There is no formal restriction on length; however, original articles and reviews of less than 15000 words are likely to appear sooner than longer ones. Short communications should not exceed 1500 words and News and Views Commentaries 500 words.

Manuscripts should be organised as follows: Title page (with full names and addresses of all authors, a running headline of up to 35 characters, and a contact address with telephone and fax numbers), an Abstract of not more than 250 words followed by 5 Keywords, Introduction, Materials and Methods, Results, Discussion (combined Results and Discussion may be used for short papers), Acknowledgements, References, Endnotes, Tables and Figure Legends.

Type double-spaced throughout on one side only and number all pages consecutively. When an article has been accepted for publication, the author is strongly encouraged to send a copy of the final version on computer disk (Apple Macintosh or IBM compatible PC) together with the hard copy typescript, giving details of the wordprocessing software used (Microsoft Word, Word or Word Perfect). However, the publisher reserves the right to typeset material by conventional means if an author's disk proves unsatisfactory. Disks will not be returned.

Manuscripts should be prepared using SI units.

Figures should be numbered consecutively as they appear in the text. Mark each figure with the first author's name

CAMBRIDGE UNIVERSITY PRESS

The Pitt Building, Trumpington Street, Cambridge CB2 1RP, UK 40 West 20th Street, New York, NY 10011–4211, USA 10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Typeset in Great Britain by Computape Ltd, North Yorkshire Printed in Great Britain by Bell & Bain Ltd, Glasgow and figure number on the reverse, and indicate its orientation. Any indication of features of special interest should also be included. Authors should submit three copies of each illustration. Figures should be drawn or produced by computer to about twice the final size. Wherever possible they will be reproduced with the author's original lettering. Photographs should be submitted with proposed reduction or magnification indicated, when relevant, by a scale line on, or beside, the illustration. The places for insertion into the text should be indicated in the text as 'Fig. 1' etc, and in the margin of the typescript for insertion. Legends for all illustrations should be typed together, separately from the main text. A charge will be made for colour photograph reproduction.

**Tables** with concise headings should be typed on separate sheets and numbered consecutively. Each table must have a text reference, in the form 'Table 1' etc. Indicate where tables are to be placed by means of a note in the margin.

Reference should be cited in the text as "Conklin (1905) showed" or "as shown (Conklin, 1905)". For papers with three or more authors use "et al.". A full list of references in alphabetical order should be given at the end of the text: surname of author and initials; year of publication (in parentheses); title of paper; journal or book name (the former being abbreviated in accordance with the World List of Scientific Periodicals); volume number; first and last page of the reference. For books and conference proceedings, place of publication and publisher (and editor(s) if appropriate) should be included.

**Proofs** will be sent to the author for checking. Typographical or factual errors only may be changed at proof stage. The publisher reserves the right to charge authors for correction of non-typographical errors.

25 **offprints** of each article will be supplied free to each first named author. Extra offprints may be purchased from the publisher if ordered at proof stage.

Submission of a paper will be taken to imply that it is unpublished and it is not being considered for publication elsewhere. Upon acceptance of a paper, the author will be asked to transfer copyright to the publisher.

## Zygote

The Biology of Gametes and Early Embryos

Volume 4 Issue 1 February 1996

## Contents

Concus	
Commentary Calcium and cell cycle control in early embryos Martin Wilding	1
The effect of 6-dimethylaminopurine (6-DMAP) on DNA synthesis in activated mammalian oocytes  S. Ledda, P. Loi, L. Bogliolo, R.M. Moor and J. Fulka, Jr	7
Calcium-dependent development of secondary cytostatic factor (2° CSF) from Xenopus laevis oocytes and zygotes Jianshe Zhang and Yoshio Masui	11
The role of microtubules and inositol triphosphate induced Ca <sup>2+</sup> release in the tyrosine phosphorylation of mitogen-activated protein kinase in extracts of <i>Xenopus laevis</i> oocytes  N.S. Duesbery and Y. Masui	21
Characterisation and role of integrins during gametic interaction and egg activation  Céline De Nadai, Patrick Fenichel, Michèle Donzeau, David Epel and Brigitte Ciapa	31
Protein synthesis is not required for male pronuclear formation in bovine zygotes R.C. Chian and M.A. Sirard	41
Immunocytochemical localisation of the nucleolar protein fibrillarin and RNA polymerase I during mouse early embryogenesis  Jorge M. Cuadros-Fernández and Pedro Esponda	49
The influence of ploidy on the distribution of cells in chimaeric mouse blastocysts Clare A. Everett and John D. West	59
Bovine oocyte plasma membrane binding sites for sperm plasma membrane during in vitro oocyte maturation and fertilisation  Emily Wheeler, Trish Berger and Esmail Behboodi	67
First meiosis of early dictyate nuclei from primordial oocytes in mature and activated mouse oocytes  Renata Czolowska and Andrzej K. Tarkowski	73





0967-1994(199602)4:1;1-S