

Soft cell

Life Itself

by Boyce Rensberger
Oxford University Press: 1997. Pp. 290. \$30, £21.95

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The list of past students of the physiology course at Woods Hole Oceanographic Institution in Massachusetts reads like a who's who of cell biology. In the summer of 1987, the student body included the *Washington Post* science writer, Boyce Rensberger. The four weeks he spent in the beautiful surroundings of the Marine Biology Laboratory were to prove the start of two love affairs — one with a fellow student whom he subsequently married, the other with the living cell. *Life Itself* is the product of the second infatuation.

Cell biology is a field unusually rich in excellent textbooks. Most are written by cell biologists for cell biologists. They are mostly lavishly illustrated and written with a measured authority befitting the status of their often highly distinguished authors. *Life Itself*

is like none of these. Although its structure is fairly classical, with chapters on membranes, organelles, DNA structure, protein synthesis, mitosis and so on, the style certainly is not.

For Rensberger, a macrophage is a "great hulking predator brooding silently in the dim light waiting for some signal that prey had blundered into its vicinity". Platelets are the body's "911 Rescue Squad, a SWAT team, a Rapid Deployment Force, a Red Cross, and a few other emergency response mechanisms". The nucleus is a "giant brooding dome off to one side of the cell" (later it's a Volkswagen Beetle or the yolk in a fried egg). Chaperones work "like a sculptor modifying an unsatisfactory clay figure... massaging the amino acid chain, nudging a helix sideways, or shifting a loop from this side to that". The endoplasmic reticulum is a "hot air balloon". Microtubules grow out from centrioles, "making them look like two dandelions gone to seed".

The recurring theme is the cell as a living room, with the nucleus like the Beetle parked to one side (presumably there is an integral garage — or perhaps I am starting to take all this a bit too seriously). Membranes are the walls, and the organelles are sausages, grape-

fruit and basketballs. The sperm head is the size of an overstuffed chair and the sperm must swim nearly 2,000 miles, "drawn by the egg's perfume!". Perhaps the style owes more to *Alice in Wonderland* than it does to *Molecular Biology of the Cell* but, once one has convinced oneself that it is not some elaborate joke, it becomes quite compelling.

Rensberger's fascination with cells clearly also applies to the people who study them. He frequently resorts to the journalist's stock in trade, the snappy quotation. Many famous cell biologists make cameo appearances to offer personal comments on their particular specialities. Although some of the descriptions are rather lurid, what cannot be disputed is Rensberger's wonderment and enthusiasm because it literally leaps off the page. Here is the little boy who has been locked in the chocolate factory overnight, determined to gobble up as much as possible before the morning shift arrives and sends him home to his mum. It is all good, clean fun and, in truth, a rather remarkable achievement for a non-professional. (I hesitate to call someone who has managed to publish a picture of a cytoskeleton on the front page of a serious national newspaper an amateur.)

I am not entirely sure who *Life Itself* is aimed at. Presumably it is not intended to go up against the established cell biology tomes but it is hard to imagine a better way to convey to students the thrill of looking down a microscope at a living cell — and they get a pretty respectable introduction to cell structure and function thrown in for good measure. If Rensberger's other love affair is as successful as this one, he is a lucky chap. □

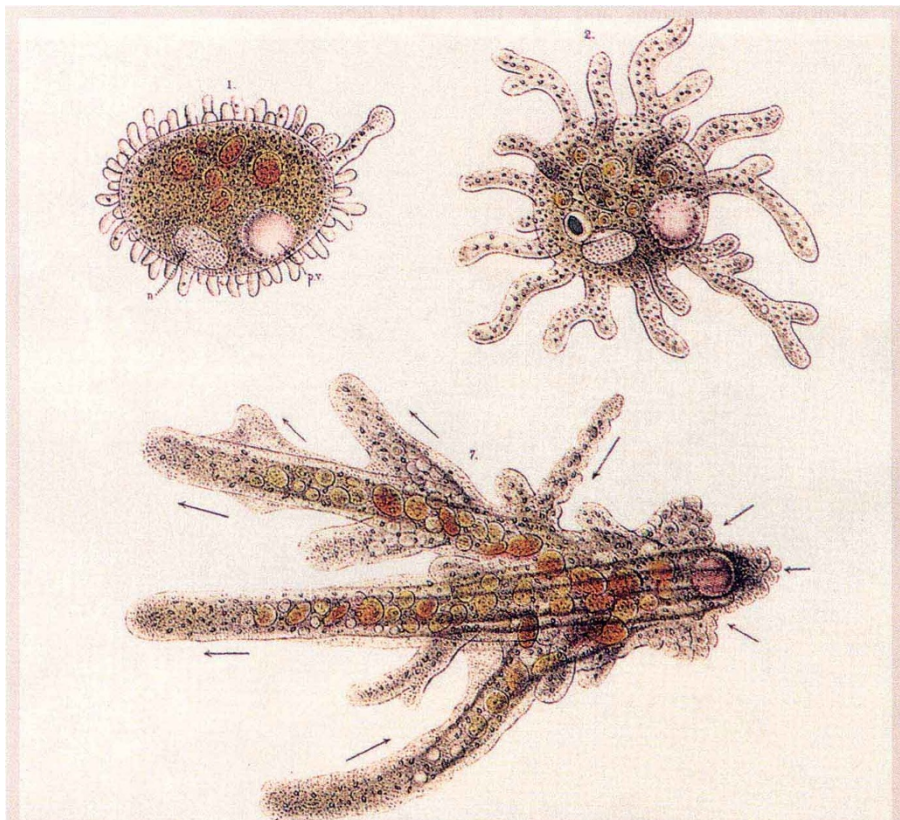
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New journals

This year, *Nature's* annual new journals review supplement will appear in the issue of 11 September. Publishers and learned societies are invited to submit journals for review, as well as details of any eligible electronic journals, taking note of the following criteria:

- Journals must have first appeared during or after June 1995 and issued at least four separate numbers by the end of May 1997.
- Journals covering any aspect of science are eligible, although those dealing with clinical medicine and pure mathematics are excluded, as are publications of abstracts.
- Frequency of publication must be at least three times a year.
- Deadline for submission is 6 June.

When submitting journals for review, please send at least four different issues (the first, the most recent and any two others) of each title, together with full details of subscription rates. For further information contact Peter Tallack, *Nature*, Macmillan Magazines, Porters South, Crinan Street, London N1 9XW, UK. Tel: +44 (0)171 843 4567. e-mail: p.tallack@nature.com.



The little changeling

The common freshwater amoeba was first described in 1755 by the German naturalist and miniature painter Roesel von Rosenhof who called it "der kleine Proteus" after the Greek sea god who could change his shape at will. It was given its official name *Amoeba proteus* by the American Joseph Leidy, whose beautifully illustrated *Fresh-water Rhizopods of North*

America, a plate of which is reproduced here, was published in 1879. The picture is one of 60 drawings and photographs chosen by Joseph G. Gall in *Views of the Cell: A Pictorial History* (American Society for Cell Biology, \$29). With the author's accompanying descriptions and historical analysis, the images pay homage to the pioneers of microscopy and cell biology.