

Reinhard Renneberg: *Biotechnology for Beginners*

The Who's Who in Biotechnology

Are American text books better than those written by elsewhere? Yes. But this state of affairs seems set to change.

For decades, biology, molecular biology and biochemistry textbooks were written by WASPS (white Anglo-Saxon males) and translated into French, German, Italian and other foreign languages.

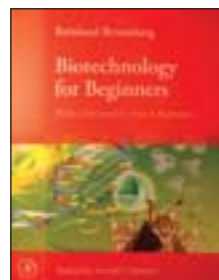
Just think of Lubert Stryer, Albert Watson and Campbell Reece. The reverse flow was more of a trickle. Virtually no German textbooks were translated into English and those that were became instant non-sellers. The reason is straightforward: American text books were better than the ones produced by Europeans. They were better written, clearer in style, more complete and they included beautiful diagrams. They even showed evidence of a sense of humour, a quality which used to be completely absent in the dry and sorry efforts of the Continentals.

This state of affairs seems set to change. One example is a book by Reinhard Renneberg, *Biotechnology for Beginners*, recently published by Academic Press (a publishing division of Elsevier in the USA). Renneberg is a professor in Hong Kong and a German national. *Biotechnology for Beginners* is an overhauled version of the German *Biotechnologie für Einsteiger*. In the German version of the book Renneberg often refers to the German way of life and cites many German scientists. He claims to have 'de-Germanized' the English version, giving more weight to Anglo-Saxon scientific culture. The English version is still heavy on the German side, however, but this makes for a refreshing change, particularly for German readers. In terms of quality though, *Biotechnology for Beginners* is a thoroughly Anglo-Saxon book. It is colourful, there are countless high quality drawings, the style is clear, it is an easy read. In fact, in some parts it reads like an illustrated magazine. Renneberg is a born storyteller.

A born storyteller

Renneberg covers all aspects of biotechnology: food production, enzymes and their applications, gene technology, white biotechnology, viruses, antibodies and vac-

cines, environmental biotechnology, analytical biotechnology, transgenic animals, the human genome and so on. Since he refers not only the facts but also the people who discovered them, the reader becomes familiar with the important personalities of the field and their biographies.



The book is almost a *Who's Who* in biotechnology. Also pleasing are the feature boxes, which contain historical digressions (How a Bacterium Founded a Country; Potatoes and Bioplastic; Lethal Microbes), expert opinions (James Larrick, Eckhard Wolf, Jörg Knäblein, David Goodsell) and, above all, pictures, pictures and pictures. James Bond, Baron Münchhausen, Bocaccio, pre-war advertisement posters, Boeotian women; you will find them all. Each chapter ends with a list of recommended reading, useful web links and eight self-test questions.

Written with an Anglo-Saxon sense of humour

The book is also decidedly Anglo-Saxon when it comes to its author's sense of humour. Renneberg's writing is warm and witty. He describes human evolution using his own Y chromosome markers and the mitochondrial DNA markers of his Chinese friend Claire Ma, a dolphin trainer. The book features cartoons of the well known German caricaturist Manfred Bofinger and quotations from the great German writer Goethe. Here is a Goethe quote which Renneberg takes as being in favor of recycling:

*My dream dog will not bite
Nor growl or snarl at you
It thrives on broken glass
And leaves diamonds in its ...*



People from related fields will learn a lot. Did you know that one quarter of the world's copper is produced by bioleaching? Or that the silk of the *Nephila* spider is used for fishing in the South Pacific?

What are the weak points?

Does *Biotechnology for Beginners* have any weak points?

Of course, a book of this size cannot be flawless in its first edition. Some of the pictures are too small and it is perhaps not commonly accepted knowledge that there was only one mitochondrial Eve, in the sense of a single person. There may be other mistakes. But one thing is sure: This book is worth buying.

HUBERT REHM

Reinhard Renneberg: *Biotechnology for Beginners*. Academic Press, 2007. 351 pages, £28.00 (€38.00).



The author, Reinhold Renneberg, wonders whether it was such a good idea to clone his tomcat after all.