

Expert Bookshelf

Cells and Microbes

Fatal System Error:
The Hunt for the New Crime Lords Who are Bringing Down the Internet
Joseph Menn
PublicAffairs, £15.99
(304pp, hbk)

FT journalist Joseph Menn uses the linked stories of website defender Barrett Lyon and UK policeman Andy Crocker to anchor a history of the development of cybercrime. From blackmail, botnets and phishing, through to identity theft, state-sponsored spying and attacks on critical infrastructure.

The story should be compelling as it ranges from Mafia-sponsored betting companies in Costa Rica to raids against the highest level Russian hacker gangs. It looks in detail at how Lyon built up his company, Prolexic, to defend sites against distributed denial-of-service attacks and how Crocker managed to work closely with the Russian Ministry of the Interior to prosecute Russian hacker Ivan Maksakov and his accomplices.

Unfortunately it is written in the flat pedestrian style beloved of US journalists and often reads more like a travel memoir than a gripping spy thriller, as the action moves between Costa Rica, Florida and Russia.

While the book may fail to grip, the issues raised are hugely important, and failure to deal with criminals behind so much online crime will be an embarrassment to governments worldwide. In the final chapter, 'Fixing What's Fixable', Menn gives a good checklist of changes that could be made to improve things. ●●●●

Bill Thompson is a technology critic and BBC broadcaster



Chosen by
Brian J Ford



Microbe Hunters
Paul de Kruif (1926)
Mariner, available online

I encountered this book in my teens – it tells of pioneering microbiologists like Antonie van Leeuwenhoek and I became intrigued by the idea of discovering his lost legacy. Little did I know that my quest would culminate in finding his original, 300-year-old specimens hidden in the vaults of the Royal Society. Molecular biology has since led us away from studying whole, living cells, though I think that will change in the future.



Cells
Benjamin Lewin and others (2006)
Jones & Bartlett, £75.99

Everything you'd need to know about cell chemistry and molecular biology is meticulously set out in this heavy book and I have often consulted it. But the problem is that it is a summary of fashionable bioscience, not real cell biology. Among the graphics are few illustrations of living cells and nothing on their remarkable lives. Lots of science but not much biology.



Who Are We? Microbes, the Puppet Masters!
Yuan Kun Lee (2009)
World Scientific, £14

This odd little book considers how our behaviour may reveal microbial traits. The notion that living nucleus-carrying cells evolved through symbiosis – algae, for instance, developing into chloroplasts – was first published by Andreas Schimper in 1883, formalised by Konstantin Mereschkowski in 1905, has been extended by Lynn Margulis since the 1980s. Though there is no reference to these pioneers and the illustrations are terrible, there are some intriguing ideas.

Prof Brian J Ford is a scientist currently studying single living cell intelligence



A culinary delight from the NASA kitchen

The Astronaut's Cookbook
Charles Bourland and Gregory Vogt
Springer, £19.99
(212pp, pbk)

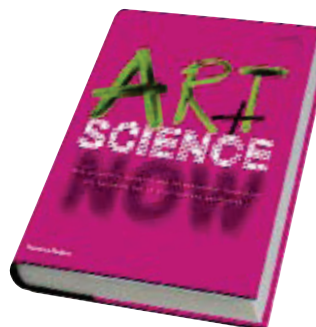


Astronauts love tortillas. First of all, they don't cause troublesome crumbs that bung up important ventilation systems and irritate nasal passages. Secondly, they make fantastic zero gravity frisbees. Just don't, as this handy manual explains, "Add the filling before you fling".

While we've all seen footage of crews playing with their food, this book highlights the problems involved in getting grub into orbit and making the NASA-approved recipes tasty enough to eat. That said, the accompanying photos are utterly unappetising. ●●●●

Cavan Scott is acting managing editor of BBC Knowledge magazine

Art + Science Now
Stephen Wilson
Thames & Hudson, £29.95
(208pp, hbk)



Art involving science as subject matter, collaboration or process has become almost mainstream. As an artist and a professor of conceptual/information arts, Wilson writes a comprehensive overview, from games that let you suck virtual goblins into a vacuum cleaner to giant cockroaches crawling over a performer's naked body.

Ironically, Wilson over-uses the word "unprecedented", there is too much jargon, and too little historical context. But you get a sense of the range and creativity of "sci-art". ●●●●

Timandra Harkness reviews TV and radio for Focus