Disease pathways: An atlas of human disease signaling pathways by Anastasia Nesterova, Anton Yuryev, Eugene Klimov, Maria Zharkova, Maria Shkrob, Natalia Ivanikova, Sergey Sozin and Vladimir Sobolev

As a researcher in life sciences, it is often difficult to untangle the signalling pathways underlying different pathologies – especially in particularly complex diseases. This book makes it so much simpler to identify individual molecules and understand their role in a disease, which is perfect for researchers and academics. Each chapter approaches a different biological system and contains a number of relevant, but distinct health conditions, e.g. glaucoma in ‘Diseases of the eye.’ There are enlightening introductions and helpful glossaries for each condition, before the key signalling pathways are explored through bright and colourful diagrams.

I would definitely recommend this book for anyone who works on disease pathology or cell biology as it is immensely useful both for deepening understanding and for quickly checking the role of a molecule in a specific disease. The writing is clear and concise and supported by beautiful diagrams; while the subjects are comprehensively covered, each section is a manageable chunk and it is very easy to quickly navigate the text. Overall, this book is a must-have for those interested in cell signalling and would make a great addition to an academic bookshelf!

Nicola Edwards
(Manchester Metropolitan University, UK)

The Future of Homo by Michel Odent

Birth is the beginning for all of us; however, the intricacies of the where, when and how of birth are sometimes seen as solely of interest to mothers-to-be, their partners, midwives and obstetricians. The Future of Homo by Michel Odent shows how this should no longer be the case and how the practicalities of birth are pertinent to any and all who are concerned with our past, present and future. In 22 concise chapters, he leads us through a web of interactions – between mother and fetus, neocortex and primal brain, genes and environment, and host and microbiome. On his way, he equips us with new ways to consider these interactions – as a futurologist, an evolutionist, a linguist, an epigeneticist or ideally as an interdisciplinary thinker. Beginning with the ‘Primal Period,’ Odent draws from the Primal Health Research Databank highlighting the fine balance of overestimating vs understating epidemiological correlative data. The book explores the overmedicalization of birth and its impact on our whole lives, from the molecules inside us to the large social groups we form. It is a multidisciplinary exploration – considering how the birth process interacts with the way we perceive the world. In his closing discussion of ageing, Odent illustrates the enduring effects of birth events, emphasizing how transformative his ideas could be, perhaps themselves shaping the future of Homo.

Evie Rothwell
(University of Oxford, UK)

The emergence of life: from chemical origins to synthetic biology by Pier Luigi Luisi

This is by no means a light-hearted scientific book or for people with only a passing interest in science. You really need to have an understanding of chemistry or biology to get to grips with this book. That being said, this book is interesting and thought-provoking. For instance, in an early section of this book, there is an intriguing discussion about why there is unlikely to be extra-terrestrial life due to the way in which a random event caused life to occur on Earth. This may not be something you expect from a book on life, but, actually, the argument solidifies the reason for our existence (and those of other life forms on Earth) and leaves you pondering whether there is life on other planets. However, the book does not solely rely on science, it also uses ideas from philosophy, religion and history to explain people’s thought processes and why these might or might not tether with the science. It takes us on a journey of life all the way from the primordial soup to how a systematic approach can be used. The book really encompasses the question ‘what is life?’

Professor Luisi uses his book to challenge your thinking processes and to leave you thinking well after you have finished the book.

Claire Price
(Swansea University Medical School, UK)