

of the financial dividends from Damadian's inventions accrued from patent infringement suits, not from building commercially successful instruments. Lauterbur's and Mansfield's contributions were what ultimately brought the technique to diagnostic practice.

More generally, Meyers uses *Prize Fight* to muse on the obsession with awards and publication in top-flight periodicals, which can ultimately devalue the passion and ingenuity of so many who will never share that limelight. External validation by one's peers is an important, but not the sole, driver of ambition. Taken to pathological extremes, the drive to satisfy this need fuels unethical behaviour and scientific misconduct. Those victimized by it may bear permanent scars or decide to leave science entirely. Milder cases abound. Disagreements and fights over authorship, priority and recognition occur wherever science is practised.

Meyers emphasizes the human nature of scientific pursuit. He reminds us that the individual scientist's contribution is ephemeral: the field moves on. Moreover, every scientist who assembles and leads a team of graduate students, postdocs and technicians has to contend with issues of priority, authorship and, less frequently, assignment of intellectual-property rights. The book has yet to be written that lays out such points of friction for the kinds of research that will never be recognized by the Nobel committee, yet drive entire disciplines relentlessly

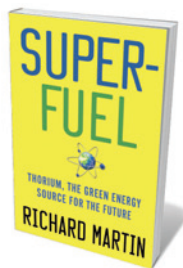
“Obsession with awards can devalue the passion and ingenuity of so many who will never share that limelight.”

forward — a category into which most of the science that has a positive impact on society probably falls. In the airline industry and medicine, checklists have become an essential step in preventing human error, whether in tightening bolts or measuring drug dosages. In the coda to *Prize Fight*, Meyers provides a checklist of sorts on how to avoid landing oneself in the intellectual and emotional morass that permanently colours the outlook of deserving but unrecognized scientists.

This starts with being aware of the problem, making an effort to be consistent in attribution of authorship, and setting criteria for establishing credit. Easier said than done: these issues are unlikely to disappear any time soon. But we ignore them at the risk of creating toxic working environments. ■

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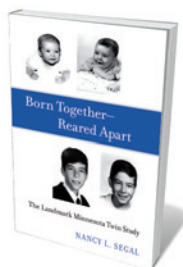
Books in brief



SuperFuel: Thorium, the Green Energy Source for the Future

Richard Martin PALGRAVE MACMILLAN 272 pp. £18.99 (2012)

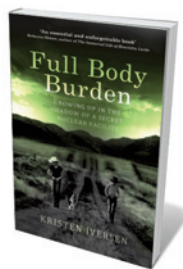
Post-Fukushima, uranium-powered plants face being phased out in many countries. But there is a nuclear alternative, argues clean-energy-research analyst Richard Martin: thorium. Less volatile than uranium, four times as abundant, energy-dense and efficient, thorium has major potential, not least because liquid fluoride thorium reactors create no nuclear waste. Martin's investigation reveals how the technology, developed at Oak Ridge National Laboratory in Tennessee, was dropped by President Richard Nixon in 1972 — and how interest is now picking up in China, India and elsewhere.



Born Together — Reared Apart

Nancy L. Segal HARVARD UNIVERSITY PRESS 416 pp. £36.95 (2012)

The 'Jim twins' constituted a watershed in the nature–nurture debate. When Jim Lewis and Jim Springer — twins separated at four months — were reunited at 39, both were found to have loved maths, worked as sheriffs and practised carpentry, among other startling parallels. The case underlined the importance of genetics and led to the Minnesota Study of Twins Reared Apart. In this inclusive overview, Nancy Segal, director of the Twin Studies Center at California State University, Fullerton, examines the study that turned ideas on parenting, teaching, health and sexual orientation upside down.



Full Body Burden: Growing Up in the Shadow of a Secret Nuclear Facility

Kristen Iversen HARVILL SECKER 416 pp. £14.99 (2012)

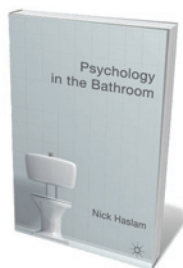
For years, Kristen Iversen's mother thought that the industrial complex in their small Colorado town manufactured cleaning agents. But this was Rocky Flats — the US government facility where the plutonium 'pits' of nuclear weapons were manufactured. And, as Iversen reveals, it was plagued by safety issues. Among the appalling twists in this tale are high levels of testicular cancer among teenage boys in the area. After an inter-agency raid in 1989, pit production ceased; but Rocky Flats makes for a story with a long half-life.



Picturing the Book of Nature: Image, Text, and Argument in Sixteenth-Century Human Anatomy and Medical Botany

Sachiko Kusakawa UNIVERSITY OF CHICAGO PRESS 304 pp. £29 (2012)

Science historian Sachiko Kusakawa probes the role of illustration in sixteenth-century medical treatises, before the advent of the microscope. Looking at Leonhart Fuch's *De historia stirpium*, Vesalius's *De humani corporis fabrica* and the unpublished *Historia plantarum* of Conrad Gessner, Kusakawa argues that such anatomical and botanic images were not simply records of natural phenomena, but varied visual experiments. His book is studded with illustrative gems, not least John Dee's 'pop-up' pyramids in *Of Euclid's Elements*.



Psychology in the Bathroom

Nick Haslam PALGRAVE MACMILLAN 184 pp. £50 (2012)

Arcane sexual behaviours are the stuff of cocktail-party chat, whereas the "psychology of flatulence" and incontinence remain taboo. Psychologist Nick Haslam eases open the bathroom door on the many human behaviours associated with excretion. Drawing on clinical research, psychoanalytical theory, language, gender and more, he conducts a fascinating neurogastroenterological journey, from scatological slang and toilet graffiti to the psychological aspects of constipation and diarrhoea. 'Toilet reading' of a high order.