La Jolla, California, with its imposing concrete facades, teak accents and white travertine marble courtyard. That bold facade was intended to lure star scientists, philanthropists and partners, and engage the public. It has done all this. When I was a graduate student there, the views of paragliders over the Pacific Ocean and the sea breezes lifted my spirits amid the worst experimental fails. What I did not understand then was the Salk's real breakthrough: its open-plan lab benches, crafted to encourage conversations and enable easy rearrangements as science evolved. Soon, this innovation was adopted the world over. (The book does not cover more-controversial aspects of the Salk's configuration: its separation of senior and junior staff, for instance, has been criticized as elitist.)

"The lack of evidence that the hipster-hub aesthetic actually recruits, retains or spurs innovators is alarming."

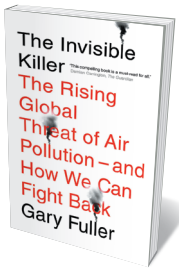
Contributors Kathleen Brandt and Brian Lonsway take us to the early 1970s with Xerox's Palo Alto Research Center (PARC) conference room, a haven decked with then-novel beanbag chairs and whiteboard walls instead of a conference table. Set in the then-nascent Silicon Valley, PARC's output was attributed as much to its culture as to the talent it attracted. Its 'creative hive' atmosphere has since been recreated, with heavy investment, at workplaces ranging from Google to biotech up-and-comer Moderna Therapeutics in Cambridge, Massachusetts. But did the beanbags boost productivity? The authors write that it is "impossible to prove causality". Given that establishing causalities is scientists' lifeblood, the lack of evidence that the hipster-hub aesthetic actually recruits, retains or spurs innovators is alarming.

In the 2000s, eminent architects created lab buildings for two companies in Basel, Switzerland — Actelion (designed by Herzog and de Meuron) and Novartis (Frank Gehry, among others) — along with Singapore's science-hub campus one-north (the late Zaha Hadid). Funky, illuminating facades take centre stage in these edifices in a bid to attract venture capitalists and encourage breakthroughs.

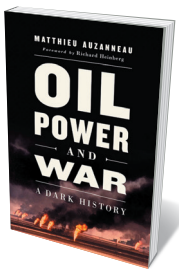
SOCIAL EXPERIMENT

The authors argue that this trend towards 'luxe labs' is a grand social experiment, with scientists as guinea pigs. They veer into an ethnographic study of researchers and their relationships to these buildings and breakout spaces, eavesdropping on their lunch conversations. They often cite the 1979 book *Laboratory Life* by ▶

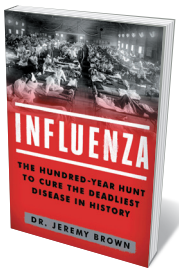
Books in brief



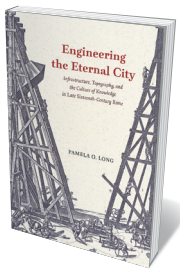
The Invisible Killer
Gary Fuller MELVILLE HOUSE *(2018)*
More than 90% of humanity is exposed to air-pollution concentrations exceeding World Health Organization guidelines. For this compelling exploration of an insidious crisis, air-quality researcher Gary Fuller travelled deep into our fume-ridden past. Here are seventeenth-century arborist John Evelyn's observations of coal-burning in London; John Switzer Owens's 1910s particulate gauges; longitudinal mortality research such as the 1993 US Six Cities study; impact analyses of lead fuels, diesel, biomass burning and land use; and a look at our current policy battle to breathe easy.



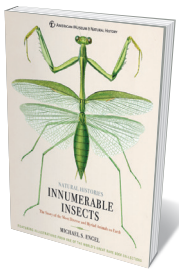
Oil, Power and War
Matthieu Auzanneau, transl. John F. Reynolds CHELSEA GREEN *(2018)*
Oil is the dirty underlay to our times, reminds journalist Matthieu Auzanneau in this prodigious chronicle of the 'fossil century'. Translated from French by John Reynolds, it is illuminating on the cascade of booms, busts, spills and quests for "nonconventional" sources such as shale. But Auzanneau extracts much more, showing how oil has shaped wars (for instance, through the decisive role of US fuel in British military aviation), Western and Arabic states, and dynasties such as the US Bush family, even as it foments environmental destruction. Auzanneau has created a towering telling of a dark and dangerous addiction.



Influenza
Jeremy Brown TOUCHSTONE *(2018)*
We should not underestimate influenza as a serial killer, notes physician Jeremy Brown in this agile study. Brown — director of emergency-care research at the US National Institutes of Health — illuminates much. Here is the science on viruses, those tiny replicating enigmas; outbreaks, from the catastrophic global 1918 Spanish flu pandemic to the 2002–03 SARS incident in which 10% of more than 8,000 people infected died; the complexities of data gathering, forecasting, drug stockpiling and vaccine hunting; and the lure of a cure. A thoughtful portrait of an elusive enemy.



Engineering the Eternal City
Pamela O. Long UNIVERSITY OF CHICAGO PRESS *(2018)*
For an 'eternal' city, Rome is hardly set in stone — and the late sixteenth century was one of its most fluid, architecturally. In this sparkling scholarly treatise, historian Pamela Long reveals how tottering infrastructure, ancient ruins and the flood-prone river Tiber were tamed by four successive popes with bold plans for the urban fabric. Drawing on a trove of archival maps and plans, Long charts the making and remaking of squares, aqueducts, sewers, streets and bridges — and engineer-hero Domenico Fontana's stupendous feat in moving a 300-tonne obelisk to front St Peter's Basilica.



Innumerable Insects
Michael S. Engel STERLING *(2018)*
Anyone who has thrilled to the shrilling of cicadas or marvelled at the bizarre behaviour of praying mantises will be entranced by this homage to the class Insecta. Distinguished entomologist Michael Engel has mined the library of New York's American Museum of Natural History, and the spectacular images on show here — by Maria Sibylla Merian, John O. Westwood and many other greats of natural-history illustration — glow like jewels in a casket. With Engel's deft text, this is a wonderful way to explore the riches of insect orders, from Blattodea to Zygentoma. **Barbara Kiser**