Books & arts

de facto mental hospitals, writes Insel. A 2014 survey found that there were ten times as many people with severe mental illnesses in US prisons as there were in state psychiatric hospitals (see go.nature.com/3kccfca).

Poor investment in mental-health care is not unique to the United States, and many countries released people from institutions once drugs were available. But most rich democracies have stronger cultures of social welfare.

Insel advocates broad care involving integrated teams of psychiatrists, psychologists, primary-care nurses and social workers. Just getting a person through a mental-health crisis doesn't necessarily help their long-term prospects. They need support to stay on their medication, to look after their general health and to get their personal lives back on track.

Insel describes programmes that tick many of those boxes – some in other countries (the United Kingdom, for example) and others around the United States. He admires the NIMH's Coordinated Specialty Care initiative for people experiencing their first episode of psychosis, in which specialists collaborate to personalize care, providing psychotherapy, medication management, family education and support, and work or education support. It is being rolled out across the country after promising early results.

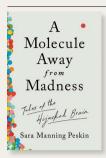
Quality of care must also improve. Most psychiatrists have sound scientific education, but fewer than 40% of US psychology and master's-of-social-work programmes train students on scientifically based therapies. Only 18% of psychiatrists and 11% of psychologists routinely administer symptom-rating scales to monitor patients' progress.

Few would disagree that politics could and should turn around the grim situation for those with mental illness. However, funding better care should not cut into the US government's strong investment in basic neuroscience. This includes the BRAIN (Brain Research through Advancing Innovative Neurotechnologies) Initiative, worth an estimated US\$6.6 billion from 2017 to 2027. That figure dwarfs similar programmes in other countries.

Such generosity is needed. The patchy performance of current therapies can be improved only through a more complete understanding of the brain, which will take time. Insel makes this point but doesn't elaborate. He's served his time in basic research, after all, and this book reflects his almost Damascene realization of its limitations in the face of racism, inequality, poor housing and education and the breakdown of community.

Alison Abbott covered neuroscience, and much else, for decades as *Nature's* Senior European Correspondent. She is based in Munich, Germany. e-mail: alison.abbott.consultant@

Books in brief



A Molecule Away from Madness

Sara Manning Peskin W. W. Norton (2022)

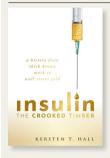
Even before COVID-19 increased the risks of cognitive impairments, it had been estimated that 152.8 million people globally would be living with dementia by 2050. Yet treatment for Alzheimer's disease has hardly improved since it was discovered in 1901, notes neurologist and dementia specialist Sara Manning Peskin. Now, most clinical trials tackling dementia are "deeply rooted in molecular data". Peskin's powerful study — immersed in her patients' stories — analyses neurology's attempt to reach oncology's molecular understanding.



The Insect Crisis

Oliver Milman Atlantic (2022)

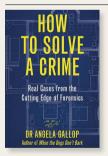
Insect decline is obvious — but hard to quantify. Environmental journalist Oliver Milman suggests a drop of more than 90% in some places, in his vivid alarm call. The causes are unclear, but include habitat destruction by intensive farming, pesticide use and climate change. Insects' "intricate dance" with Earth's environment makes them crucial to human food supplies. We should learn to eat them, not meat, suggests Milman: that will help to save them by freeing farmland from crops needed to feed livestock.



Insulin — The Crooked Timber

Kersten T. Hall Oxford Univ. Press (2022)

Insulin was first used to treat human diabetes 100 years ago, after it was isolated by two medical scientists in 1921. Historian of science Kersten Hall describes this transformative event, together with insulin's development as the first drug produced by genetic engineering and its lucrative exploitation — using a blend of profound research, lively writing and personal knowledge of diabetes. He argues that the history is a tale not of geniuses or saints, but rather one of "monstrous egos, toxic insecurities and bitter career rivalry".



How to Solve a Crime

Angela Gallop Hodder & Stoughton (2022)

More than a century ago, criminologist Edmond Locard established forensic science on the principle that "every contact leaves a trace". The field's current sophistication and contribution to justice would be beyond his "wildest imaginings", writes forensic scientist Angela Gallop. She tells gripping stories from her own and others' experience, beginning with thirteenth-century Chinese investigator Sung Tz'u. He identified a farmer's killer by asking fellow villagers to put their sickles on the ground; flies alighted on one blade bearing traces of blood.



The Sloth Lemur's Song

Alison Richard William Collins (2022)

Anthropologist and conservationist Alison Richard has been absorbed by Madagascar for half a century. She writes that the country's "animals and plants offer a wonderful array of rabbit holes down which a person fascinated by the natural world could disappear for a lifetime". Why, for example, does its largest lemur sing spellbindingly across the treetops with its mate for many minutes? And what environmental conditions created the island's unique — now disastrously threatened — biodiversity? **Andrew Robinson**

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