

## Reading and Viewing List: KIP 2022

### Section 1: Central governor – the brain is the final barrier

#### 1. The Perfect Mile: Three Athletes, One Goal, and Less Than Four Minutes to Achieve It (Neil Bascombe)

The inspirational story of three international runners attempting to achieve what no one had managed – to break the four-minute mile barrier. It was the ultimate test of endurance, and the human drama that unfolded is told here for the first time. In sport, running the four-minute mile was the elusive Holy Grail, considered by most to be beyond the limits of human endeavor. Then in late 1952, shortly after the Helsinki Olympics, three men set out to challenge the record books: Roger Bannister, the Oxford medical student, the great British hero who epitomized the ideal of the amateur athlete; John Landy, the tireless Australian, the romantic who trained night and day in search of perfection; and the American Wes Santee, son of a Kansas ranch hand, a natural runner and the quickest of the three ('I was just born to run fast!'). Three men, each of contrasting character, competing thousands of miles apart, but all with the same valedictory goal. The Perfect Mile is the stirring account of their quest for sporting martyrdom, charting their journey through triumph and failure, culminating in the moment when Bannister broke the record in a monumental run at the Iffley Road cinder track in Oxford in May 1954. Far from bringing an end to the rivalry, this watershed moment turned out to be merely the prelude to a final climactic battle three months later – the ultimate head-to-head between Bannister and Landy in what was dubbed 'the mile of the century' at the Vancouver Empire Games. Bascombe provides a fascinating account of what happened and an invaluable insight into the motivations and characters of three amazing achievers.

#### 2. One step beyond (C. Moon)

While supervising mine-clearance in Mozambique in 1995, Chris Moon was blown up in the supposedly clear area of the safety lane. He lost his lower right leg and right arm and survived only through sheer determination. Less than a year after leaving hospital, he ran the London Marathon, raising money for charities assisting the disabled, defying all expectations for his own future. He has since completed more than fifteen other marathons, including the punishing Marathon des Sables, which is a 137 mile race across the Sahara. "One Step Beyond" is Chris Moon's story so far. He has led a life of remarkable experiences, from being one of the few people to survive kidnap by the Khmer Rouge, to running the final stage of the Olympic torch relay to Nagano for the opening of the 18th Winter Olympics in 1998. Chris Moon writes with wit and charm, passion and belief, and his tale is truly one of adventure, romance and inspiration.

### **3. Between a rock and a hard place (Aaron Ralston)**

On Saturday, 26 April 2003, Aaron Ralston, a 27-year-old outdoorsman and adventurer, set off for a day's hike in the Utah canyons. Eight miles from his truck, he found himself in the middle of a deep and remote canyon. Then the unthinkable happened: a boulder shifted and snared his right arm against the canyon wall. He was trapped, facing dehydration, starvation, hallucinations and hypothermia as night-time temperatures plummeted. Five and a half days later, Aron Ralston finally came to the agonising conclusion that his only hope was to amputate his own arm and get himself to safety.

### **4. Touching the Void (Joe Simpson)**

An account of the ascent of the 21,000ft Siula Grande peak in the Peruvian Andes. Joe Simpson and his climbing partner, Simon Yates, had achieved the summit before the first disaster struck. What happened and how they dealt with the psychological traumas that resulted is the subject of this book.

### **5. My Stroke of Insight (Dr Jill Bolte Taylor)**

Jill Bolte Taylor was a 37-year-old Harvard-trained and published brain scientist when a blood vessel exploded in her brain. Through the eyes of a curious neuroanatomist, she watched her mind completely deteriorate whereby she could not walk, talk, read, write, or recall any of her life. Because of her understanding of how the brain works, her respect for the cells composing her human form, and an amazing mother, Jill completely recovered her mind, brain and body. In *My Stroke of Insight: A Brain Scientist's Personal Journey*, Jill shares with us her recommendations for recovery and the insight she gained into the unique functions of the right and left halves of her brain. Having lost the categorizing, organizing, describing, judging and critically analyzing skills of her left brain, along with its language centers and thus ego center, Jill's consciousness shifted away from normal reality. In the absence of her left brain's neural circuitry, her consciousness shifted into present moment thinking whereby she experienced herself "at one with the universe."

### **6. Meaning, Medicine and the "Placebo Effect" (Daniel Moerman)**

Daniel Moerman presents an innovative and enlightening discussion of human reaction to the meaning of medical treatment. Traditionally, the effectiveness of medical treatments is attributed to specific elements, such as drugs or surgical procedures, but many things happen in medicine which simply cannot be accounted for in this way. The same drug can work differently when presented in different colours; drugs with widely advertised names can work better than the same drug without the name; inert drugs (placebos, dummies) often have dramatic effects on people (the 'placebo effect'); and effects can vary hugely among different European countries where the 'same' medical condition is understood differently, or has different meanings. This is true for surgery as well as for internal medicine. This lively 2002 book reviews and analyses these matters in lucid, straightforward prose, guiding the reader through a very complex body of literature, leaving nothing unexplained but avoiding any over-simplification.

## **7. Able-Bodied: Scenes from a Curious Life (Leslie Swartz)**

In *Able-Bodied*, acclaimed psychologist Leslie Swartz explores the subject of disability through a personal narrative about his life and his relationship with his own disabled father. While Swartz has dealt with disability in an academic manner in his professional work, this title views it through the lens of memoir. At the heart of the story is a moving account of a complex, troubled, but loving father-son relationship, a relationship that spurred a lifetime of trying to understand and come to grips with what different bodies and different abilities mean for us all. Poignant and often hilarious, this is a tale of conflict, achievement, pain and triumph. *Able-Bodied* is a fascinating blend of personal narrative and reflection on society, medicine and ethics.

## **8. When Breath Becomes Air (Paul Kalanithi)**

At the age of thirty-six, on the verge of completing a decade's worth of training as a neurosurgeon, Paul Kalanithi was diagnosed with stage IV lung cancer. One day he was a doctor treating the dying, and the next he was a patient struggling to live. And just like that, the future he and his wife had imagined evaporated. *When Breath Becomes Air* chronicles Kalanithi's transformation from a naïve medical student "possessed," as he wrote, "by the question of what, given that all organisms die, makes a virtuous and meaningful life" into a neurosurgeon at Stanford working in the brain, the most critical place for human identity, and finally into a patient and new father confronting his own mortality.

## **9. Surgery, The Ultimate Placebo (Ian Harris)**

For many complaints and conditions, the benefits from surgery are lower, and the risks higher, than you or your surgeon think. In this book you will see how commonly performed operations can be found to be useless or even harmful when properly evaluated. That these claims come from an experienced, practicing orthopaedic surgeon who performs many of these operations himself, makes the unsettling argument particularly compelling. Of course no surgeon is recommending invasive surgery in bad faith, but Ian Harris argues that the evidence for the success for many common operations, including knee arthroscopies, back fusion or cardiac stenting, become current accepted practice without full examination of the evidence. The placebo effect may be real, but is it worth the recovery time, expense and discomfort?

## **Section 2: Applying science to life**

### **1. Bad Science: Quacks, Hacks, and Big Pharma Flacks (Ben Goldacre)**

Have you ever wondered how one day the media can assert that alcohol is bad for us and the next unashamedly run a story touting the benefits of daily alcohol consumption? Or how a drug that is pulled off the market for causing heart attacks ever got approved in the first place? How can average readers, who aren't medical doctors or Ph.D.'s in biochemistry, tell what they should be paying attention to and what's, well, just more bullshit? Ben Goldacre has made a point of exposing quack doctors and nutritionists, bogus credentialing programs, and biased scientific studies. He has also taken the media to task for its willingness to throw facts and proof out the window. But he's not here just to tell you what's wrong. Goldacre is here to teach you how to evaluate placebo effects, double-blind studies, and sample sizes, so that you can recognize bad science when you see it. You're about to feel a whole lot better.

### **2. Bad Pharma: How drug companies mislead doctors and harm patients (Ben Goldacre)**

'Bad Science' hilariously exposed the tricks that quacks and journalists use to distort science, becoming a 400,000 copy bestseller. Now Ben Goldacre puts the \$600bn global pharmaceutical industry under the microscope. What he reveals is a fascinating, terrifying mess.

Doctors and patients need good scientific evidence to make informed decisions. But instead, companies run bad trials on their own drugs, which distort and exaggerate the benefits by design. When these trials produce unflattering results, the data is simply buried. All of this is perfectly legal. In fact, even government regulators withhold vitally important data from the people who need it most. Doctors and patient groups have stood by too, and failed to protect us. Instead, they take money and favours, in a world so fractured that medics and nurses are now educated by the drugs industry.

Patients are harmed in huge numbers.

### **3. Explain Pain (Moseley & Butler) // Explain Pain Super Charged (Moseley & Butler)**

All pain is real, and for many people it is a debilitating part of everyday life. It is now known that understanding more about why things hurt can actually help someone understand their pain and go about their daily life. Recent advances in fields such as neurophysiology, brain imaging, immunology, psychology and cellular biology have provided an explanatory platform from which to explore pain. In everyday language accompanied by quirky illustrations, *Explain Pain* discusses how pain responses are produced by the brain: how responses to injury from the autonomic motor and immune systems in your body contribute to pain, and why pain can persist after tissues have had plenty of time to heal. *Explain Pain* aims to give clinicians and people in pain the power to challenge pain and to consider new models for viewing what happens during pain. Once they have learnt about the processes involved they can follow a scientific route to recovery.

#### **4. Painful Yarns (L. Moseley)**

This much anticipated collection of stories, written by clinical neuroscientist and co-author of Explain Pain, Dr GL Moseley, provides an entertaining and informative way to understand modern pain biology. Described by critics as 'a gem' and by clinicians as 'entertaining and educative', Painful Yarns is a unique book. The stories, some of his travels in outback Australia, some of experiences growing up, are great yarns. At the end of each story, there is a section "so what has this got to do with pain?" in which Lorimer uses the story as a metaphor for some aspect of pain biology. The level of the pain education is appropriate for patients and health professionals. The entertainment is good for everyone. You don't have to be interested in pain to get something from this book and a laugh or two!

#### **5. Why zebras don't get ulcers (R. Sapolsky)**

Now in a third edition, Robert M. Sapolsky's acclaimed and successful Why Zebras Don't Get Ulcers features new chapters on how stress affects sleep and addiction, as well as new insights into anxiety and personality disorder and the impact of spirituality on managing stress. As Sapolsky explains, most of us do not lie awake at night worrying about whether we have leprosy or malaria. Instead, the diseases we fear - and the ones that plague us now - are illnesses brought on by the slow accumulation of damage, such as heart disease and cancer. When we worry or experience stress, our body turns on the same physiological responses that an animal's does, but we do not resolve conflict in the same way - through fighting or fleeing. Over time, this activation of a stress response makes us literally sick. Combining cutting-edge research with a healthy dose of good humour and practical advice, Why Zebras Don't Get Ulcers explains how prolonged stress causes or intensifies a range of physical and mental afflictions, including depression, ulcers, colitis, heart disease, and more. It also provides essential guidance to controlling our stress responses.

#### **6. Mortal Combat: AIDS denialism and the Struggle for Anti retrovirals in South Africa (Nicoli Nattras)**

Mortal Combat is a history of AIDS policy in South Africa. The book exposes the strategy and tactics of AIDS denialists and focuses on the struggle for antiretrovirals to prevent mother-to-child transmission of HIV and to extend the lives of people living with AIDS. \*\*\* "AIDS denialism has resulted in the deaths of at least hundreds of thousands of people. Nattrass's book provides an important service to the world and will save lives." - Mark Wainberg, Director of the McGill U. AIDS Centre, past President of the International AIDS Society, and co-chair of the Toronto 2006 AIDS Conference.

#### **7. Ingenious Pain- (Andrew Miller)**

"What does the world need most--a good, ordinary man, or one who is outstanding, albeit with a heart of ice?" This is the question at the heart of Andrew Miller's first novel, Ingenious Pain, a book set during the 18th-century Age of Enlightenment. The outstanding man in question is James Dyer, an English freak of

nature who, since birth, has been impervious to physical pain. Not only does he feel no pain, but he recovers from all injuries in record time. As a surgeon, James Dyer excels, and his inability to feel--whether physical pain himself or empathy for others-- seems only to enhance his skill with a knife. James slices and dices and cures without a scintilla of compassion while his reputation grows, until at last he arrives in Russia and the mystery of his unusual quality is resolved.

## **8. Listening to Pain: A Clinician's Guide to Improving Pain Management Through Better Communication (Scott Fishman)**

In this ground-breaking book, Dr. Fishman shows how communicating better with patients about their pain can help physicians create safer and more effective treatment strategies. Listening to Pain offers physicians a wealth of practical guidance about asking the right questions and assessing patient responses, including: - What questions to ask pain patients when they first present with pain -Using functional goals as outcome measures -Educating patients about the risks and benefits of treatment - Documenting patient consent and compliance with treatment regimens -How to manage difficult patients

## **9. The Body in Pain: The making and Unmaking of the World (Elaine Scarry)**

Part philosophical meditation, part cultural critique, The Body in Pain is a profoundly original study that has stirred excitement in a wide range of intellectual circles. The book is an analysis of physical suffering and its relation to the numerous vocabularies and cultural forces--literary, political, philosophical, medical, religious--that confront it. Elaine Scarry bases her study on a wide range of sources: literature and art, medical case histories, documents on torture compiled by Amnesty International, legal transcripts of personal injury trials, and military and strategic writings by such figures as Clausewitz, Churchill, Liddell Hart, and Kissinger. She weaves these into her discussion with an eloquence, humanity, and insight that recall the writings of Hannah Arendt and Jean-Paul Sartre.

## **10. Empire of pain (Patrick Radden Keefe)**

Empire of Pain: The Secret History of the Sackler Dynasty is a 2021 book by Patrick Radden Keefe. The book examines the history of the Sackler family, including the founding of Purdue Pharma, their role in the marketing of pharmaceuticals, and the family's central role in the opioid epidemic.

## **11. When Your Child Hurts: Effective Strategies to Increase Comfort, Reduce Stress, and Break the Cycle of Chronic Pain (Rachael Coakley)**

## **12. The Body Keeps the Score: Brain, Mind, and Body in the Healing (Bessel van der Kolk)**

## Section 3: Viewings

### 1. *Wit* (2001)

Emma Thompson and Mike Nichols' adaptation of Margaret Edson's intellectual anti-intellectual play "Wit," which won the 1999 Pulitzer Prize, movingly explores a tough but emotionally homeless scholar's confrontation with a life-threatening illness. At the same time, it ruthlessly deconstructs the modern medical research establishment. This excellent film is driven by Edson's sharp dialogue, Nichols' controlled direction and Thompson's riveting, dead-on portrayal of the scholar, with fine supporting performances by the other actors, including a brief appearance by playwright Harold Pinter as her father.

### 2. *The Intouchables*

The French have done it again, striking cinematic gold with another unlikely film. First it was *The Artist*, a love story embraced by audiences and showered with Oscars even though it is silent. Now an irreverent film about disability has broken box-office records across the world. Just as the Paralympics are changing perceptions about disability, cinema is pushing at the same boundaries with *The Intouchables*, an uplifting comedy about the friendship that develops between a wealthy quadriplegic, Philippe, and his carer, Driss, an ex-convict.

### 3. *Episodes of House* – Season 6 (Episode 4): "The Tyrant" and Season 5 (Episode 12): "Painless"

### 4. TED talks – watch the following collection of TED talks:

1. Amy Cuddy ([http://www.ted.com/talks/amy\\_cuddy\\_your\\_body\\_language\\_shapes\\_who\\_you\\_are.html](http://www.ted.com/talks/amy_cuddy_your_body_language_shapes_who_you_are.html))
2. Abraham Verghese ([http://www.ted.com/talks/abraham\\_verghese\\_a\\_doctor\\_s\\_touch.html](http://www.ted.com/talks/abraham_verghese_a_doctor_s_touch.html))
3. Ben Goldacre ([http://www.ted.com/talks/ben\\_goldacre\\_what\\_doctors\\_don\\_t\\_know\\_about\\_the\\_drugs\\_they\\_prescribe.html](http://www.ted.com/talks/ben_goldacre_what_doctors_don_t_know_about_the_drugs_they_prescribe.html)) and ([http://www.ted.com/talks/ben\\_goldacre\\_battling\\_bad\\_science.html](http://www.ted.com/talks/ben_goldacre_battling_bad_science.html))
4. Alberto Cairo (<http://blog.ted.com/2011/12/23/there-are-no-scraps-of-men-alberto-cairo-on-ted-com/>)
5. Elliot Krane ([http://www.ted.com/talks/elliott\\_krane\\_the\\_mystery\\_of\\_chronic\\_pain.html](http://www.ted.com/talks/elliott_krane_the_mystery_of_chronic_pain.html))
6. Peter O' Sullivan (<https://www.youtube.com/watch?v=e13gSp1lFe8>) (Evidence changes and so should your beliefs)
7. Joshua Pate (<https://ed.ted.com/lessons/the-fascinating-science-of-phantom-limbs-joshua-w-pate>)

