Each of us knows what it is like to be guilty, sad, anxious, or “lose our temper.” But why is it that we humans are so vulnerable to depression, addiction, autism and other mental disorders? Could the answer be found in the way that natural selection shaped our brains?

With his classic book Why We Get Sick, world renowned psychiatrist Randolph Nesse explored the evolutionary reasons for physical illness. Now he returns with a book that transforms our understanding of mental disorders by exploring why natural selection has left us with fragile minds.

Drawing on revealing stories from his own clinical practice and insights from evolutionary biology, Nesse shows how negative emotions are useful in certain situations, yet can become excessive. Anxiety protects us from harm in the face of danger, but false alarms are inevitable. Low mood prevents us from wasting effort in pursuit of unreachable goals, but it often escalates into pathological depression. Other mental disorders, such as addiction and anorexia, result from the mismatch between modern environments and our ancient human past. And, genes that cause autism and schizophrenia may persist for good reasons. Taken together, these insights and many more help to explain the pervasiveness of human suffering, and show us new paths for relieving it.

Many have called for new approaches to mental illness. Evolutionary psychiatry provides one based on solid science. Good Reasons for Bad Feelings will fascinate anyone who wonders how our minds can be so powerful, yet so fragile.

Randolph M. Nesse, MD is a founder of the field of evolutionary medicine and co-author with George C. Williams of Why We Get Sick. He served for many years as Professor of Psychiatry, Professor of Psychology, and Research Professor at the University of Michigan. He currently is the Founding Director of the Center for Evolution and Medicine at Arizona State University, where he is also a Foundation Professor in the School of Life Sciences. He is a Fellow of the Association for Psychological Science, a Distinguished Fellow of the American Psychiatric Association, and an elected Fellow of the American Association for the Advancement of Science.
ADVANCE PRAISE FOR *Good Reasons for Bad Feelings*

“To quote a renowned geneticist, 'Nothing in biology makes sense except in the light of evolution.' A quarter century ago, Randolph Nesse bravely helped apply this dictum to medicine. Now, in *Good Reasons For Bad Feelings*, he tackles the deeper evolutionary question of why we, our minds, and our brains are so vulnerable to mental illness. He navigates the dangers of either too much or too little adaptationism, deftly handles the false dichotomy between psychological and biological perspectives, and bridges abstract intellectualizing with pressing clinical need. This is a wise, accessible, highly readable exploration of an issue that goes to the heart of human existence.”

—Robert Sapolsky, Professor of Biology, Stanford University, author of *Behave*

“Randolph Nesse is one of the key architects of evolutionary medicine. He’s been an inspiration to a generation of scientists who explore evolution to understand why we get sick from diseases ranging from cancer to obesity to infectious diseases. Now Nesse has turned his attention from the body to the mind, in a provocative book full of intriguing explanations about human nature in all its strengths and weaknesses.”

—Carl Zimmer, author of *She Has Her Mother’s Laugh: The Powers, Perversions, and Potential of Heredity*

“A book as wise and illuminating as it is relevant to our daily lives.” —Sarah Blaffer Hrdy, Professor Emerita of Anthropology, UC Davis, author of *The Woman that Never Evolved and Mother Nature*

“Randolph Nesse, who trained psychiatrists for many years, has for a quarter century been a key leader of evolutionary medicine. Good Reasons for Bad Feelings integrates these two strands of his life and thought in a readable, insightful book, as much a philosophy of emotions as it is a new window on mental illness. All who want to know themselves should read it.”

—Melvin Konner, Dobbs Professor of Anthropology, Emory University, author of *The Tangled Wing*

“Clear and engaging, and the narrative reflects a masterful blend of history, novel ideas, and clinical experience in an insightful and coherent manner. I hope it is widely read and discussed.”

—Eric Charnov, Distinguished Professor Emeritus of Evolutionary Ecology, University of Utah, MacArthur Fellow

“This will become a treasured classic; not just for clinicians but for all those interested in how to facilitate well-being and create more moral communities and societies.”

—Professor Paul Gilbert OBE, Professor of Clinical Psychology, the University of Derby, author of *Compassionate Mind*

“‘Why am I feeling bad?’ This is the first burning question of everyone who suffers. This accessible new book will be an essential tool to help patients, their loved ones, and treating professionals arrive at more satisfying answers.”

—Jonathan Rottenberg, Professor of Psychology, University of South Florida, author of *The Depths*

This engagingly accessible, pioneering book provides a wide range of answers for how something as maladaptive as bipolar disorders could have evolved. It provides a wide range of answers for why natural selection has left us vulnerable to so many mental disorders. —Christopher Boehm, Professor of Biological Sciences, USC Dornsife, author of *Moral Origins*

“A bold book that would have made Darwin proud. Cutting-edge and compassionate at the same time”

—Lee Dugatkin, Professor of Biology, University of Louisville, co-author of *How to Tame a Fox and Build a Dog*

“Those powerful feelings that fill our day, that give us the oomph to act one way or another are the guardrails to living and this wonderful book explains all of them. Randolph Nesse has done it again.”

—Michael S. Gazzaniga, Director, Sage Center, UC Santa Barbara, author of *Tales from Both Sides of the Brain*
"""Two sets of ideas inform this fine book: one, the cold-hearted logic of natural selection; the other, the practical wisdom of a compassionate psychiatrist. The tension is palpable. The result is riveting."
—Nicholas Humphrey, Emeritus Professor of Psychology, London School of Economics, author of Soul Dust

"What is the nature of suffering, its origin and its adaptive significance? Good Reasons for Bad Feelings may well become a legend, as it is a book about psychology, psychiatry, biology and philosophy that is also a good read, and it opens the door to deep questions in a manner that is tender, quizical, and industrious."
—Judith Eve Lipton, MD, co-author of Strength Through Peace

"This book sets out to show how evolution underpins (or should underpin) psychiatry. In doing so, it will surely change the face of medicine -- and deservedly so."
—Robin Dunbar, Emeritus Professor of Evolutionary Psychology, University of Oxford author of Human Evolution

Randolph Nesse explains, in this highly readable book, how 'symptoms' in psychiatry should be seen in their evolutionary context, and that anxiety and depression for example have functions, just as do inflammation, blood clotting, or a cough. Nesse is a pioneer of evolutionary psychiatry, which has the potential to revolutionize mental health care."
—Simon Baron Cohen, Professor of Developmental Psychopathology, Cambridge University, author of The Maladapted Mind

A masterful, groundbreaking book that persuasively challenges standard clinical wisdom and provides a roadmap for the transformation of our conceptually confused psychiatric nosology. If joy is indeed a biologically programmed emotional response motivating us to take advantage of unexpected bounty and opportunity, then every reader will experience joy in reading Randy Nesse's beautifully written, profound book."
—Jerome C. Wakefield, Professor of Psychiatry, New York University, co-author of The Loss of Sadness

"Good Reasons for Bad Feelings by Randy Nesse is a delightful book. It is insightful about the human condition, sanguine and not over-stated. And it is written in a straight-forward and delightful manner, personal and professional, and with humor. —Jay Schulkin, Research Professor of Neuroscience, Georgetown University, author of The CRF Signal

“It is testament to Professor Nesse’s command of the field of evolution and medicine as well as his extra-ordinary ability to explain enormously complex ideas in plain English with minimal use of jargon that the book is just as relevant to psychiatrists, psychologists of all levels as well as to academics interested in evolutionary science.” —Riadh Abed, MD, Chairman of the Executive Committee of the Royal College of Psychiatry Special Interest Group on Evolutionary Psychiatry

"Very engagingly written for the general reader, Nesse’s book is hugely important for the future of mental health care. It draws on an impressive range of knowledge, from not only psychiatry, including extensive case descriptions, but also psychology, biology, philosophy, and humanistic literature. Many readers will find it hard to put the book down."
—Eric Klinger, Emeritus Professor of Psychology, University of Minnesota, author of Meaning and Void

"In Good Reasons for Bad Feelings, leading evolutionary theorist, psychiatrist Randolph Nesse, begs us to ask the right question: Why did natural selection make us so prone to mental disorders of so many kinds and intensities? It is no exaggeration to say that he opens the door to a new paradigm in thinking about human beings and their conflicted lives."
—Michael Ruse, Werkmeister Professor of Philosophy, Florida State University, author of On Purpose
Good Reasons for Bad Feelings
Insights from the Frontier of Evolutionary Psychiatry
by Randolph M. Nesse, MD

Slow progress in finding causes and cures for mental disorders has inspired a growing chorus of calls for new approaches. GOOD REASONS FOR BAD FEELINGS asks a fundamentally new question. Instead of asking why some people get sick, it instead asks why natural selection left all of us so vulnerable to mental illness. The limits of natural selection offer one kind of answer, but several others are equally important. Our environments are vastly different from those we evolved in, making us vulnerable to addiction and eating disorders. Bad feelings like anxiety and low mood are, like pain and cough, useful in certain situations, but they often help our genes, not us, and, like smoke detectors, they are prone to false alarms. Social anxiety is nearly universal because our ancestors who cared what others thought about them did better than other people. Guilt makes morality possible, and grief is the nearly unbearable price of love. Recognizing the evolutionary origins of such symptoms helps to distinguish them from diseases. Trying to understand an emotion requires understanding individuals as individuals.

Topics discussed in this sweeping, game-changing book include:

- **How emotions were shaped to benefit our genes, not our health or happiness:** Jealousy increases fitness, even as it wrecks lives; it hurts to hear babies cry, so parents tend to them; sexual feelings get many people to do things good for their genes but disastrous for them.

- **How the smoke detector principle explains useless anxiety:** should you run if you hear a noise behind a hill that could be a lion? The cost of running is likely to be small compared to the cost of not running if a lion is really there, so false alarms are normal and necessary.

- **The price we pay for deep, meaningful relationships:** Grief and guilt are the price of love and goodness. They exist because we have been domesticated over thousands of years by individuals choosing partners and friends who are honest, trustworthy, kind and generous; worry about what others think of us and the pain of loss are the price of deep relationships.

- **Why addiction is an unavoidable consequence of our ability to learn:** We adapt our behavior as a function of our experiences, doing whatever works. Drugs our ancestors never encountered hijack the system, turning some people into zombies.

- **Why sexual problems are common:** Sexual systems evolved to benefit our genes, at big costs to us.

- **Why eating disorders are common:** Many studies ask why certain individuals are prone to eating disorders but Nesse asks a different question: how do mechanisms that evolved to cope with famine generate uncontrolled eating in modern environments?

- **Why genes for schizophrenia and autism persist:** Some are mutations, but others keep a system close to a fitness peak, despite the risk of catastrophic mental failure.

- **Why it is usually safe to relieve emotional pain, even when it is normal:** Sometimes painful emotions help us, but usually they are excessive or useless. An evolutionary perspective encourages respect for our emotions, but also determined efforts to find new strategies for prevention and treatment.

- **How an evolutionary foundation can help resolve controversies and put psychiatry on the same biological foundation as the rest of medicine:** Evolution is a basic science for medicine. GOOD REASONS FOR BAD FEELINGS shows how it offers a way forward in our quest to understand, prevent and treat mental illness.