Alcohol And The Addictive Brain: New Hope For Alcoholics From Biogenetic Research

Addictive Substances and Neurological Disease: Alcohol, Tobacco, Caffeine, and Drugs of Abuse in Everyday Lifestyles is a complete guide to the manifold effects of addictive substances on the brain, providing readers with the latest developing research on how these substances are implicated in neurological development and dysfunction. Cannabis, cocaine, and other illicit drugs can have substantial negative effects on the structure and functioning of the brain. However, other common habituating and addictive substances often used as part of an individual's lifestyle, i.e., alcohol, tobacco, caffeine, painkillers can also compromise brain health and effect or accentuate neurological disease. This book provides broad coverage of the effects of addictive substances on the brain, beginning with an overview of how the substances lead to dysfunction before examining each substance in depth. It discusses the pathology of addiction, the structural damage resulting from abuse of various substances, and covers the neurobiological, neurodegenerative, behavioral, and cognitive implications of use across the lifespan, from prenatal exposure, to adolescence and old age. This book aids researchers seeking an understanding of the neurological changes that these substances induce, and is also extremely useful for those seeking potential treatments and therapies for individuals suffering from chronic abuse of these substances. Integrates current research on the actions of addictive substances in neurological disease Includes functional foods, such as caffeine beverages, that have habituating effects on the brain Provides a synopsis of key ideas associated with the consequences of addictive and habituating lifestyle substances

We live in an age of addiction, from compulsive gaming and shopping to binge eating and opioid abuse. What can we do to resist temptations that insidiously and deliberately rewire our brains? Nothing, David Courtwright says, unless we understand the global enterprises whose "limbic capitalism" creates and caters to our bad habits.

Written by international leaders in the field of alcoholism, this book provides an interdisciplinary source of information on alcoholism that links together science, policy, and public health in order to emphasise the importance of scientific knowledge with deciding public health policy.

"Addiction is epidemic and catastrophic. With more than one in every five people over the age of fourteen addicted, drug abuse has been called the most formidable health problem worldwide. If we are not victims ourselves, we all know someone struggling with the merciless compulsion to alter their experience by changing how their brain functions. Drawing on years of research--as well as personal experience as a recovered addict--researcher and professor Judy Grisel has reached a fundamental conclusion: for the addict, there will never be enough drugs. The brain's capacity to learn and adapt is seemingly infinite, allowing it to counteract any regular disruption, including that caused by drugs. What begins as a normal state punctuated by periods of being high transforms over time into a state of desperate craving that is only temporarily subdued by a fix, explaining why addicts are unable to live either with or without their drug. One by one, Grisel shows how different drugs act on the brain, the kind of experiential effects they generate, and the specific reasons why each is so hard to kick. Grisel's insights lead to a better understanding of the brain's critical contributions to addictive behavior, and will help inform a more rational, coherent, and compassionate response to the epidemic in our homes and communities"--

The Neuroscience and Experience of Addiction

Mastering the Addicted Brain

Science, Policy and Public Health

A Neuroscientist Examines his Former Life on Drugs

Building a Sane and Meaningful Life to Stay Clean

How Bad Habits Became Big Business

INSTANT NEW YORK TIMES and LOS ANGELES TIMES BESTSELLER "Brilliant… riveting, scary, cogent, and cleverly argued."—Beth Macy, author of Dopesick As heard on Fresh Air This book is about pleasure. It's also about pain. Most important, it's about how to find the delicate balance between the two, and why now more than ever finding balance is essential. We're living in a time of unprecedented access to high-reward, high-dopamine stimuli: drugs, food, news, gambling, shopping, gaming, texting, sexting, Facebooking, Instagramming, YouTubing, tweeting… The increased numbers, variety, and potency is staggering. The smartphone is the modern-day hypodermic needle, delivering digital dopamine 24/7 for a wired generation. As such we've all become vulnerable to compulsive overconsumption. In Dopamine Nation, Dr. Anna Lembke, psychiatrist and author, explores the exciting new scientific discoveries that explain why the relentless pursuit of pleasure leads to pain…and what to do about it. Condensing complex neuroscience into easy-to-understand metaphors, Lembke illustrates how finding contentment and connectedness means keeping dopamine in check. The lived experiences of her patients are the gripping fabric of her narrative. Their riveting stories of suffering and redemption give us all hope for managing our consumption and transforming our lives. In essence, Dopamine Nation shows that the secret to finding balance is combining the science of desire with the wisdom of recovery.

Recent scientific advances have provided substantial information on the brain circuits and pathways relevant to various aspects of dependence. Neurobiology of Alcohol Dependence highlights the most recent data at the molecular, cellular, neurocircuitry, and behavioral levels, fostering an understanding how neuroplasticity and neuroadaptation occur, and how different neural pathways and neurocircuits contribute to dependence. Highlights recent advances in understanding alcohol addiction from molecular, cellular, neurocircuitry, and behavioral levels Integrates several emerging areas of research and discusses the application of novel research techniques to the understanding of alcohol dependence Chapters authored by leaders in the field around the globe — the broadest, most expert coverage available

Drugs, Addiction, and the Brain explores the molecular, cellular, and neurocircuitry systems in the brain that are responsible for drug addiction. Common neurobiological elements are emphasized that provide novel insights into how the brain mediates the acute rewarding effects of drugs of abuse and how it changes during the transition from initial drug use to compulsive drug use and addiction. The book provides a detailed overview of the pathophysiology of the disease. The information provided will be useful for neuroscientists in the field of addiction, drug abuse treatment providers, and undergraduate and postgraduate students who are interested in learning the diverse effects of drugs of abuse on the brain. Full-color circuitry diagrams of brain regions implicated in each stage of the addiction cycle Actual data figures from original sources illustrating key concepts and findings Introduction to basic neuropharmacology terms and concepts Introduction to numerous animal models used to study diverse aspects of drug use. Thorough review of extant work on the neurobiology of addiction

The question how alcohol alters mood states and why this may end up becoming an addiction is puzzling alcohol researchers since decades. In this volume, an assembly of highly distinguished experts and leaders in alcohol addiction research provides lucid presentations of the current knowledge and research challenges as well as interesting viewpoints on future research directions aimed to stimulate communication and convergence between clinical and preclinical researchers, and to renew interest in the vibrant field of alcohol addiction research among a wide scientifically minded audience. Five Current Topics are discussed in this volume: Neurobiological mechanisms of alcoholism, Genetics, Clinical phenotypes and their preclinical models, Brain imaging, and Translational approaches for treatment development, both pharmacological and non-pharmacological. These areas have in our opinion brought alcohol research substantially forward and influenced our thinking about how to reach our common paramount goal, namely to offer effective treatment solutions for an extensive group of patients with largely unmet medical needs.

The Selfish Brain

The Urge

The Age of Addiction

Alcohol and the Addictive Brain

Alcohol

Behavioral Neurobiology of Alcohol Addiction

Many books cater to the fitness and nutritional needs of the general public. But little of this advice is specifically directed toward those who have the literally life-or-death need to keep alcohol, drug, gambling, sex, internet and other addictions at bay. How exercise and diet speed up the recovery process and promote relapse prevention is a case rarely made, even by most treatment facilities!Rebalancing the Addictive Mind is an evidence-based, accessible guide that explains how and why exercise and diet produce faster physical, psychological and emotional recovery from addiction and significantly reduce the chances of relapse. And how anyone, despite almost any age or infirmity, can benefit from the principles outlined in this book.Author Shelley Poerio, a licensed addiction counselor and certified fitness trainer, describes how substance dependence and behavioral compulsions change the brain and body, provides guidance and solutions to undo the damage, and motivates change in the recovering individual. Family members gain insight into how to support their loved-one in recovery and better understand how addictive thinking and behaviors get out of control. Counseling and medical professionals will appreciate the cognitive-behavioral, solutions-focused therapeutic approach and the integration of exercise and nutritional concepts with 12-step recovery principles. Ms. Poerio bases her case on the biochemical science of addiction. In the early sections of the book, she examines the anatomy and functions of the brain, and explains the ability of substance and behavioral addictions to exploit brain chemistry and create cravings and dependence. A crucially important aspect of this story, for teenagers and their parents, is that teens are particularly susceptible to developing addictions. Fortunately, the biochemistry of addiction can be turned against itself. Many of us know the positive feelings of well-being that result from working out and eating well. Rebalancing the Addictive Mind reveals in detail why this is just what the doctor ordered to fight addictions. Exercise and diet are uniquely qualified to replace the highs produced by drugs and alcohol, and undo the damage they cause. Aerobic and strength training act as safe substitutes that stimulate the brain's neurotransmitters in much the same way that addictive substances do. Exercise promotes improved brain function and neuronal growth. Proper nutrition prevents the mood swings that can provoke a relapse, and corrects the addiction-caused deficiencies that harm major organs and bodily processes. With a bristling arsenal of therapeutic weapons, exercise and diet use restorative biology to fight the biology of addiction, and empower the brain and body to heal themselves. Ms. Poerio – a former track athlete at Stanford University – draws not only on the latest research, but on her own experience. The plans she outlines combine elements of her workouts with future pro and Olympic athletes at Stanford, and with young (and old) substance abusers as the counseling/fitness-program developer at the Phoenix House of the Mid-Atlantic in Arlington, Virginia. All of her strategies are easy to put into practice, and set realistic goals. They produce encouraging results for the average person in recovery in part because they are simple to do and likely to be used regularly.Above all, however, Rebalancing the Addictive Mind speaks to and motivates its readers on a very personal and understanding level. Ms. Poerio, an alcoholic/addict in recovery since 2001, introduces the book by describing her own substance-induced suicidal ideation that forced her on the road to rehabilitation. Her book includes simple anecdotes – about her work to help her clients and herself – that make it clear she has "been there and done that," and that anyone armed with her book and the willingness to put in some work can do it too.

New York Times Bestseller! "New, scientifically-based approaches that recognize the biological basis of addiction have brought major advances in the treatment of addiction. Dr. Urschel is at the forefront of this treatment paradigm." Dr. Larry Hanselka, Psychologist The Proven Scientific Approach to Conquering Addiction and Defeating the Disease Healing the Addicted Brain is a breakthrough work that focuses on treating drug and alcohol addiction as a biological disease—based on the Recovery Science program that has helped thousands of patients defeat their addictions over the past 10 years. It combines the best behavioral addiction treatments with the latest scientific research into brain functions, providing tools and strategies designed to overcome the biological factors that cause addictive behavior along with proven treatments and medications. Using this scientific approach, you will learn to conquer the physical factors that keep people tied to drug and alcohol addiction. The proven fact is addiction is not a moral failing or an issue of not having enough willpower. It is a disease of the brain that can and must be treated like other chronic medical illnesses —such as diabetes, hypertension, or asthma—in order to defeat the disease. This revolutionary program can triple the success rate of patients, from 20-30% to 90% There Is Hope. By understanding addiction and using 21st-century breakthroughs, for the first time drug and alcohol addiction can be, and will be, defeated.

"Drugs, Brains, and Behavior" is an online textbook written by C. Robin Timmons and Leonard W. Hamilton. The book was previously published by Prentice Hall, Inc. in 1990 as "Principles of Behavioral Pharmacology." The authors attempt to develop an understanding of the interpenetration of brain, behavior and environment. They discuss the chemistry of behavior in both the literal sense of neurochemistry and the figurative sense of an analysis of the reactions with the environment.

Marc Lewis's relationship with drugs began in a New England boarding school where, as a bullied and homesick fifteen-year-old, he made brief escapes from reality by way of cough medicine, alcohol, and marijuana. In Berkeley, California, in its hippie heyday, he found methamphetamine and LSD and heroin; he sniffed nitrous oxide in Malaysia; and frequented Calcutta's opium dens. Ultimately, though, his journey took him where it takes most addicts: into a life of desperation, deception, and crime. But unlike most addicts, Lewis recovered to become a developmental psychologist and researcher in neuroscience. In Memoirs of an Addicted Brain, he applies his professional expertise to a study of his former self, using the story of his own journey through addiction to tell the universal story of addictions of every kind.

Control Alcohol, Find Freedom, Discover Happiness & Change Your Life

How Drug and Alcohol Addiction Hijacks Our Brains the Science Behind Twelve-Step Recovery

Unbroken Brain

Memoirs of an Addicted Brain

The Science of Addiction

Hijacked Brains

This Naked Mind has ignited a movement across the country, helping thousands of people forever change their relationship with alcohol. Many people question whether drinking has become too big a part of their lives, and worry that it may even be affecting their health. But, they resist change because they fear losing the pleasure and stress-relief associated with alcohol, and assume giving it up will involve deprivation and misery. This Naked Mind offers a new, positive solution. Here, Annie Grace clearly presents the psychological and neurological components of alcohol use based on the latest science, and reveals the cultural, social, and industry factors that support alcohol dependence in all of us. Packed with surprising insight into the reasons we drink, this book will open your eyes to the startling role of alcohol in our culture, and how the stigma of alcoholism and recovery keeps people from getting the help they need. With Annie's own extraordinary and candid personal story at its heart, this book is a must-read for anyone who drinks. This Naked Mind will give you freedom from alcohol. It removes the psychological dependence so that you will not crave alcohol, allowing you to easily drink less (or stop drinking). With clarity, humor, and a unique blend of science and storytelling, This Naked Mind will open the door to the life you have been waiting for. "You have given me my live back." —Katy F., Albuquerque, New Mexico "This is an inspiring and groundbreaking must-read. I am forever inspired and changed." —Kate S., Los Angeles, California "The most selfless and amazing book that I have ever read." —Bernie M., Dublin, Ireland

For anyone trying to overcome an addiction, living with someone with an addiction, or helping someone with an addiction As most drug and alcohol addicts eventually realize, good intentions alone aren't enough to break destructive habits. However, addiction can be managed once its true nature is understood. This simple yet profound guidebook takes you step-by-step through the process of building a life after addiction by adopting new behaviors that create lasting change. An internationally renowned psychiatrist, neurologist, and addiction specialist, Dr. Walter Ling has worked with thousands of addicts, their loved ones, and fellow clinicians. His no-nonsense, no-judgment approach, which he calls the "neuroscience of common sense," advocates holistic methods to prevent relapse and establish new patterns to create a sustainable, meaningful life.

An authoritative, illuminating, and deeply humane history of addiction—a phenomenon that remains baffling and deeply misunderstood despite having touched countless lives—by an addiction psychiatrist striving to understand his own family and himself "Carl Erik Fisher's The Urge is the best-written and most incisive book I've read on the history of addiction. In the midst of an overdose crisis that grows worse by the hour and has vexed America for centuries, Fisher has given us the best prescription of all: understanding. He seamlessly blends a gripping historical narrative with memoir that doesn't self-aggrandize; the result is a full-throated argument against blaming people with substance use disorder. The Urge is a propulsive tour de force that is as healing as it is enjoyable to read."—Beth Macy, author of Dopesick Even after a decades-long opioid overdose crisis, intense controversy still rages over the fundamental nature of addiction and the best way to treat it. With uncommon empathy and erudition, Carl Erik Fisher draws on his own experience as a clinician, researcher, and alcoholic in recovery as he traces the history of a phenomenon that, centuries on, we hardly appear closer to understanding—let alone addressing effectively. As a psychiatrist-in-training fresh from medical school, Fisher was soon face-to-face with his own addiction crisis, one that nearly cost him everything. Desperate to make sense of the condition that had plagued his family for generations, he turned to the history of addiction, learning that the current quagmire is only the latest iteration of a centuries-old story: humans have struggled to define, treat, and control addictive behavior for most of recorded history, including well before the advent of modern science and medicine. A rich, sweeping account that probes not only medicine and science but also literature, religion, philosophy, and public policy, The Urge illuminates the extent to which the story of addiction has persistently reflected broader questions of what it means to be human and care for one another. Fisher introduces us to the people who have endeavored to address this complex condition through the ages: physicians and politicians, activists and artists, researchers and writers, and of course the legions of people who have struggled with their own addictions. He also examines the treatments and strategies that have produced hope and relief for many people with addiction, himself included. Only by reckoning with our history of addiction, he argues—our successes and our failures—can we light the way forward for those whose lives remain threatened by its hold. The Urge is at once an eye-opening history of ideas, a riveting personal story of addiction and recovery, and a clinician's urgent call for a more expansive, nuanced, and compassionate view of one of society's most intractable challenges.

This book, written from the perspective of a practicing primary care physician, interweaves patientsÕ stories with fascinating new brain research to show how addictive drugs overtake basic brain functions and transform them to create a chronic illness that is very difficult to treat. The idea that drug and alcohol addiction are chronic illnesses and not character flaws is not newsÑthis notion has been around for many years. What Hijacked Brains offers is context and personal stories that demonstrate this point in a very accessible package. Dr. Barnes explores how the healthy brain works, how addictive drugs flood basic reward pathways, and what it feels like to grapple with addiction. She discusses how, for individuals, the combination of genetic and environmental factors determines both vulnerability for addiction and the resilience necessary for recovery. Finally, she shows how American culture, with its emphasis on freewill and individualism, tends to blame the addict for bad choices and personal weakness, thereby impeding political and/or health-related efforts to get the addict what she needs to recover.

The Pharmacology of Alcohol and Drugs of Abuse and Addiction

Neurobiology of Alcohol Dependence

Why We Abuse Drugs, Alcohol, and Nicotine

Overload

Addictive Disorders

Beating Addiction with Exercise and Nutrition

A NEW YORK TIMES BESTSELLER More people than ever before see themselves as addicted to, or recovering from, addiction, whether it be alcohol or drugs, prescription meds, sex, gambling, porn, or the internet. But despite the unprecedented attention, our understanding of addiction is trapped in unfounded 20th century ideas, addiction as a crime or as brain disease, and in equally outdated treatment. Challenging both the idea of the addict's "broken brain" and the notion of a simple "addictive personality," The New York Times Bestseller, Unbroken Brain, offers a radical and groundbreaking new perspective, arguing that addictions are learning disorders and shows how seeing the condition this way can untangle our current debates over treatment, prevention and policy. Like autistic traits, addictive behaviors fall on a spectrum -- and they can be a normal response to an extreme situation. By illustrating what addiction is, and is not, the book illustrates how timing, history, family, peers, culture and chemicals come together to create both illness and recovery- and why there is no "addictive personality" or single treatment that works for all. Combining Maia Szalavitz's personal story with a distillation of more than 25 years of science and research,Unbroken Brain provides a paradigm-shifting approach to thinking about addiction. Her writings on radical addiction therapies have been featured in The Washington Post, Vice Magazine, The Wall Street Journal, and The New York Times, in addition to multiple other publications. She has been interviewed about her book on many radio shows including Fresh Air with Terry Gross and The Brian Lehrer show.

"Why develop a booklet about helping kids avoid alcohol?" Alcohol is a drug, as surely as cocaine and marijuana are. It's also illegal to drink under the age of 21. And it's dangerous. Kids who drink are more likely to: * Be victims of violent crime. * Have serious problems in school. * Be involved in drinking-related traffic crashes. This guide is geared to parents and guardians of young people ages 10 to 14. These suggestions are just that--suggestions. Trust your instincts. Choose ideas you are comfortable with, and use your own style in carrying out the approaches ou find useful. Your child looks to you for guidance and support in making life decisions--including the decision not to use alcohol .Audience: Parents, child counselors, educators, child psychologists, physicians, school guidance counselors, and teenagers may be interested in this resource. Related products: Other products related to Women's Health can be found here: https://bookstore.gpo.gov/catalog/health-benefits/womens-health Other products related to Alcoholism can be found here: https://bookstore.gpo.gov/catalog/health-benefits/alcoholism-smoking-substance-abuse Other products produced by National Institute on Alcohol Abuse and Alcoholism can be found here: https://bookstore.gpo.gov/agency/1720

Understanding Alcoholism as a Brain Disease includes an in-depth explanation of how alcoholism works inside the brain; the stages of alcoholism identified by scientific researchers; and a list of clues to your genetic vulnerability.Written in plain English from a true medical perspective, even if you aren't a doctor or scientist, you'll find this book easy to read and understand. This is the second volume in the Rethinking Drinking series that emerged out of the authors first book, A Prescription for Alcoholics-Medications for Alcoholism. Alcoholics, care-givers and loved-ones ask, ?Why does the alcoholic keep drinking or continue to return to drinking, despite all they continue to lose?, ?What is wrong with them?!? Alcoholics berate themselves and question why they keep drinking when they see the damage it causes. They ask, ?What is wrong with me?The answers to those agonizing questions are found in this book. You'll learn about alcoholism as a complex brain disease. This book will help you understand the disease in a way that provides a fresh new perspective on this devastating neurological condition.

In the groundbreaking work, Miller ad Blum provide an in-depth picture of what attention deficit hyperactivity disorder really looks like, why people self-medicate with mood-altering substances, and how this leads to addiction. Miller and Blum also offer possible solutions for escaping the deadly spiral that entraps those unfortunate enough to be afflicted by both illnesses. The book contains Millers poignant and enlightening first-person account of his battle with ADHD and alcohol, as well as case studies that highlight other problems associated with the disorder. Providing the right balance of scientific information, Blum analyzes genetic influences, brain chemistry, and behavioral reactions to give a full picture of ADHD and addiction.

Understanding Alcoholism as a Brain Disease

Addictive Substances and Neurological Disease

Alcohol, Tobacco, Caffeine, and Drugs of Abuse in Everyday Lifestyles

Finding Balance in the Age of Indulgence

Neuroscience of Alcohol

Never Enough

A doctor in recovery provides a guided tour through the brain changes, genetics, and psychology that cause addiction... and how to use this information to beat addiction. The Alcoholic / Addict Within is a book that empowers alcoholics and addicts - and those who wish to understand them - with an understanding of the science behind why we become addicted, why we do the things we do, and why it is so difficult to stop.The science is presented in everyday language, and with a sense of humor that makes it a fun read. The information enables a deeper understanding of ourselves and our addiction. It allows those who love us to get a look inside us, and (for once) find an understanding of our disease. Anyone who reads this will never again ask us: "why don't you just stop?!?" They will see first hand that alcoholism / addiction is a disorder of biology and not a failing of morality. They will learn how they can best help us.The 12 Steps are used as a framework for applying the science to recovery. The 12 Step program was chosen because it is remarkably consistent with all aspects of the science of addictions. For those working the 12 Steps or sponsoring others the information will enrich the experience by matching the science to the program. For those who are not involved in that program the information is equally applicable to their own recovery.The science is used to explain the basis of some effects widely experienced by people in recovery: the "insanity" of alcoholism/addiction, the "pink cloud" effect, relapse dreams, hostage-taking, "wet brain," co-dependency, relationships, and obsession. Also addressed are important recovery issues such as self-esteem, coming to terms with past traumas, dealing with anger, finding peace-of-mind, self-forgiveness, and putting a stop to cravings. The question: "do I have an alcoholism / addiction gene, and will I pass it on to my children?" is answered.Also explored are the intimate ties between alcoholism / addiction and mental illness. They are so alike we can barely tell them apart, and so woven together that one can kindle the fire of the other. In fact, it can be very difficult - sometimes impossible - to figure out which came first and brought the other on. Or even to tell them apart. We get to the bottom of this compelling issue that affects well over half of addicts and alcoholics.The book speaks to many audiences. The main audience is alcoholics/addicts and those who wish to help and understand them. Loved ones, teachers, clergy, medical professionals, counsellors and therapists, all will gain insight and understanding.

A current survey and synthesis of the most important findings in our understanding of the neurobiological mechanisms of addiction is detailed in our Neurobiology of Addiction series, each volume addressing a specific area of addiction. ALCOHOL, Volume 3 in the series, explores the molecular, cellular, and neurocircuitry systems in the brain responsible for alcohol addiction using the heuristic three-stage cycle framework of binge/intoxication, withdrawal/negative affect, and preoccupation/anticipation. Outlines the history and behavioral mechanism of action of alcohol relevant to the neurobiology of alcohol addiction Includes neurocircuitry, cellular, and molecular neurobiological mechanisms of alcohol addiction in each stage of the addiction cycle Explores evolving areas of research associated with all three stages of the alcohol addiction cycle, including neurobiological studies of neurodevelopmental effects of early exposure to alcohol, sleep disturbances caused by alcohol, pain interactions with alcohol, sex differences in the response to alcohol, and epigenetic/genetic interactions with alcohol.

This volume is intended for clinicians, researchers, residents, and students. The range is wide and the depth considerable for all the topics covered in the treatment of this timely and relevant subject. This book may serve equally well as a general introduction and a scholarly reference. Ultimately, it is designed to serve those patients suffering from abuse of and addiction to drugs and alcohol. The content and organization of the book flow from general concepts of abuse and addiction to specific details of the pharmacology of alcohol and drugs. Special chapters on topics not found in most other books, such as pharmacology of drug-drug interactions, abstinence, and prevention, are included. This book is written especially for the clinician interested in the pharma cology of alcohol and drugs of abuse and addiction. The pharmacology is integrated into a conceptual approach to diagnosis and treatment of alcohol and drug abuse and addiction. The form and style are didactic, critical as well as straightforward in presentation. Literature references from recent clinical research and basic research provide the foundation for the chapters throughout the book. Be cause the book is written by a clinician-researcher, the information is readily adaptable to clinical problems and research ideas. I would like to express my deep appreciation to Susan Newsom and Darlene Tucci for their invaluable technical assistance. Norman S. Miller vii Contents Preface ..... vii CHAPTER 1 Introduction to the Pharmacological Effects of Alcohol and Drugs and Addiction on the Brain and Behavior .... 1 . . . . . .

Hijacking the Brain provides the first-ever scientific explanation for the success of Twelve-Step programs. Hijacking the Brain examines data provided by recent rapid growth in the fields of neuroscience, neuroimaging, psychology, sociobiology and interpersonal neurobiology that have given us new, dramatic insights into the neural and hormonal correlates of stress and addiction, cognitive decline with addiction, as well as for the relative success of Twelve-Step Programs of recovery. Addiction is recognized by experts as an organic brain disease, and most experts promote Twelve-Step programs (AA, NA, CA, etc.) which invoke a 'spiritual solution' for recovery. To date, no one has described why these programs work. 'Hijack' tells us why. In 'Hijack, ' the role of 'working The Steps' for reducing stress and becoming emotionally centered is discussed in depth. A full chapter is devoted to the rewarding and comforting physiology of meditation and the spiritual experience. The author uses examples from animal sociobiology, as well as sophisticated human brain-imaging studies, to demonstrate that empathic socialization and altruism are instinctive and 'naturally rewarding' and, along with Step Work, act as a substitute for the 'synthetic rewards' of drugs of abuse. 'Hijack' does not challenge the Steps or the Traditions of Twelve-Step programs. The sole intention of Hijacking the Brain is to 'connect the dots' between an 'organic brain disease' and a 'spiritual solution' with sound physical, scientific evidence. Avoiding strict scientific language as much as possible, 'Hijack' is written for the layperson and abundantly illustrated.

The Addictive Brain

Drugs, Addiction, and the Brain

Learning from Addiction

Dopamine Nation

Evaluating the Brain Disease Model of Addiction

The Revolutionary, Science-Based Alcoholism and Addiction Recovery Program

Finally, there is a cure for alcoholism. This is the first step. Featuring new and updated information and studies, including an introduction by actress Claudia Christian, the second edition of The Cure for Alcoholism delivers exactly what millions of alcoholics and families of alcoholics have been hoping for: a painless, dignified, and medically proven cure for their addiction. Backed by 82 clinical trials and research that extends back to 1964, The Sinclair Method deploys an opiate-blocking medication in a very specific way—in combination with ongoing drinking—to extinguish the addictive "software" in the brain. The de-addiction process rolls back the addictive mechanism in the brain to its original pre-addicted state—before the first drink was consumed, making this program an actual cure for alcoholism. Drs. Roy Eskapa and David Sinclair of The Sinclair Method have put together a sound scientific book that proves that with this particular method, alcoholism can be cured in more than 78 percent of patients. What's more, the treatment avoids the dangerous withdrawal symptoms, allowing patients to detox gradually and safely while they are still drinking. This removes the need for expensive and unpleasant inpatient rehabilitation programs. Actual drinking levels and cravings automatically decrease until control over alcohol is restored. The bottom line is that patients can control their drinking or stop altogether with the simple yet powerful process outlined in The Cure for Alcoholism. Including a new introduction by actress Claudia Christian about The Sinclair Method's impact on her life, updated trial information, and a letter explaining the treatment that can be given to doctors by patients, The Cure for Alcoholism is a revolutionary book for anyone who wants to gain control over drinking.

Through the vivid, true stories of five people who journeyed into and out of addiction, a renowned neuroscientist explains why the "disease model" of addiction is wrong and illuminates the path to recovery. The psychiatric establishment and rehab industry in the Western world have branded addiction a brain disease. But in The Biology of Desire, cognitive neuroscientist and former addict Marc Lewis makes a convincing case that addiction is not a disease, and shows why the disease model has become an obstacle to healing. Lewis reveals addiction as an unintended consequence of the brain doing what it's supposed to do-seek pleasure and relief-in a world that's not cooperating. As a result, most treatment based on the disease model fails. Lewis shows how treatment can be retooled to achieve lasting recovery. This is enlightening and optimistic reading for anyone who has wrestled with addiction either personally or professionally.

A gripping, ultimately triumphant memoir that's also the most comprehensive and comprehensible study of the neuroscience of addiction written for the general public. FROM THE INTRODUCTION: "We are prone to a cycle of craving what we don't have, finding it, using it up or losing it, and then craving it all the more. This cycle is at the root of all addictions, addictions to drugs, sex, love, cigarettes, soap operas, wealth, and wisdom itself. But why should this be so? Why are we desperate for what we don't have, or can't have, often at great cost to what we do have, thereby risking our peace and contentment, our safety, and even our lives?" The answer, says Dr. Marc Lewis, lies in the structure and function of the human brain. Marc Lewis is a distinguished neuroscientist. And, for many years, he was a drug addict himself, dependent on a series of dangerous substances, from LSD to heroin. His narrative moves back and forth between the often dark, compellingly recounted story of his relationship with drugs and a revelatory analysis of what was going on in his brain. He shows how drugs speak to the brain - which is designed to seek rewards and soothe pain - in its own language. He shows in detail the neural mechanics of a variety of powerful drugs and of the onset of addiction, itself a distortion of normal perception. Dr. Lewis freed himself from addiction and ended up studying it. At the age of 30 he traded in his pharmaceutical supplies for the life of a graduate student, eventually becoming a professor of developmental psychology, and then of neuroscience - his field for the last 12 years. This is the story of his journey, seen from the inside out.

This ground-breaking book advances the fundamental debate about the nature of addiction. As well as presenting the case for seeing addiction as a brain disease, it brings together all the most cogent and penetrating critiques of the brain disease model of addiction (BDMA) and the main grounds for being skeptical of BDMA claims. The idea that addiction is a brain disease dominates thinking and practice worldwide. However, the editors of this book argue that our understanding of addiction is undergoing a revolutionary change, from being considered a brain disease to a disorder of voluntary behavior. The resolution of this controversy will determine the future of scientific progress in understanding addiction, together with necessary advances in treatment, prevention, and societal responses to addictive disorders. This volume brings together the various strands of the contemporary debate about whether or not addiction is best regarded as a brain disease. Contributors offer arguments for and against, and reasons for uncertainty; they also propose novel alternatives to both brain disease and moral models of addiction. In addition to reprints of classic articles from the addiction research literature, each section contains original chapters written by authorities on their chosen topic. The editors have assembled a stellar cast of chapter authors from a wide range of disciplines – neuroscience, philosophy, psychiatry, psychology, cognitive science, sociology, and law – including some of the most brilliant and influential voices in the field of addiction studies today. The result is a landmark volume in the study of addiction which will be essential reading for advanced students and researchers in addiction as well as professionals such as medical practitioners, psychiatrists, psychologists of all varieties, and social workers.

The Experience and Science of Chronic Addiction

Make a Difference: Talk to Your Child about Alcohol

Healing the Addicted Brain

The Medically Proven Way to Eliminate Alcohol Addiction

The Science of Addiction: From Neurobiology to Treatment

The Cure for Alcoholism

Neuroscience of Alcohol: Mechanisms and Treatment presents the fundamental information necessary for a thorough understanding of the neurobiological underpinnings of alcohol addiction and its effects on the brain. Offering thorough coverage of all aspects of alcohol research, treatment and prevention, and containing contributions from internationally recognized experts, the book provides students, early-career researchers, and investigators at all levels with a fundamental introduction to all aspects of alcohol misuse. Alcohol is one of the world's most common addictive substances, with about two billion individuals worldwide consuming it in one form or another and three million annual deaths that are associated with alcohol misuse. Alcohol alters a variety of neurological processes, from molecular biology, to cognition. Moreover, addiction to alcohol can lead to numerous other health concerns and damage virtually every organ system in the body, making diagnosis and treatment of individuals addicted to alcohol of critical importance. Integrates cutting-edge research on the pharmacological, cellular and molecular aspects of alcohol use, along with its effects on neurobiological function Discusses alcohol use as a component of dual-use and poly addictions Outlines numerous screening and treatment strategies for alcohol misuse Covers both the physical and psychological effects of alcohol use and withdrawals to provide a fully-formed view of alcohol dependency and its effects

An understanding of the nature and progression of alcohol addiction has emerged: alcoholism as the result of an imbalance in the brain's natural production of neurotransmitters critical to our sense of wellbeing. This imbalance, which an increasing amount of evidence is demonstrating to be genetically influenced, produces a craving temporarily satisfied by drinking. Alcohol and the Addictive Brain is an account of the scientific discoveries concerning alcoholism.

The Selfish Brain explains how individuals and communities are affected by drugs such as alcohol, tobacco, marijuana, cocaine, and heroin, and how treatment can lead to whole healthy, lives. Why is the brain so vulnerable to the effects of alcohol and other drugs? How does addiction echo through families, cultures, and history? What is it that families and communities do to promote or prevent addiction?These are some of the questions that this thorough, thoughtful, and well-reasoned book answers--in clear, comprehensible terms. From the basics of brain chemistry to the workings of particular drugs such as alcohol, tobacco, marijuana, cocaine, and heroin, The Selfish Brain explains how individuals and communities become trapped in destructive habits--and how various treatments and approaches lead to recovery and whole, healthy lives.

Neurobiology of Addiction is conceived as a current survey and synthesis of the most important findings in our understanding of the neurobiological mechanisms of addiction over the past 50 years. The book includes a scholarly introduction, thorough descriptions of animal models of addiction, and separate chapters on the neurobiological mechanisms of addiction for psychostimulants, opioids, alcohol, nicotine and cannabinoids. Key information is provided about the history, sources, and pharmacokinetics and psychopathology of addiction of each drug class, as well as the behavioral and neurobiological mechanism of action for each drug class at the molecular, cellular and neurocircuitry level of analysis. A chapter on neuroimaging and drug addiction provides a synthesis of exciting new data from neuroimaging in human addicts — a unique perspective unavailable from animal studies. The final chapters explore theories of addiction at the neurobiological and neuroadaptational level both from a historical and integrative perspective. The book incorporates diverse finding with an emphasis on integration and synthesis rather than discrepancies or differences in the literature. · Presents a unique perspective on addiction that emphasizes molecular, cellular and neurocircuitry changes in the transition to addiction · Synthesizes diverse findings on the neurobiology of addiction to provide a heuristic framework for future work · Features extensive documentation through numerous original figures and tables that that will be useful for understanding and teaching

Alcohol Research & Health

*A bold new approach to breaking free from *drug addiction *overeating *alcoholism *gambling*

The Alcoholic / Addict Within: Our Brain, Genetics, Psychology and the Twelve Steps as Psychotherapy

Rebalancing the Addictive Mind

The Addicted Brain

Neurobiology of Addiction

ERICKSON/SCIENCE OF ADDICTION

Where do the roots of addictive behavior lie -- in our genes or in our environment, in our chemistry or in our character? In the Craving Brain, Dr. Ronald Ruden asserts that the roots of addiction most defintetly do not lie in our character. Rather, they lie in a complex chain reaction that originates in an ancient survival mechanism in the brain. When this system is inappropriately activated, it drives the body to crave, sometimes with addictive behavior as the end result. In clear, straightforward language, Dr. Ruden outlines his remarkable successful treatment program which he believes can cure this problem. The Craving Brain offers crucial insights into the world of addiction. This revolutionary book will bring hope to millions of people who suffer from a wide range of addictions, from gambling and alcohol to drugs and food.

A scientific explanation of addiction by a leading neuroscientist looks at how and why people become addicts and discusses advances in prevention and treatment.

Runner-up winner of the Hamilton Book Author Award, this book is a comprehensive overview of the neurobiology behind addictions. Neuroscience is clarifying the causes of compulsive alcohol and drug use—while also shedding light on what addiction is, what it is not, and how it can best be treated—in exciting and innovative ways. Current neurobiological research complements and enhances the approaches to addiction traditionally taken in social work and psychology. However, this important research is generally not presented in a forthright, jargon-free way that clearly illustrates its relevance to addiction professionals. The Science of Addiction presents a comprehensive overview of the roles that brain function and genetics play in addiction. It explains in an easy-to-understand way changes in the terminology and characterization of addiction that are emerging based upon new neurobiological research. The author goes on to describe the neuroanatomy and function of brain reward sites, and the genetics of alcohol and other drug dependence. Chapters on the basic pharmacology of stimulants and depressants, alcohol, and other drugs illustrate the specific and unique ways in which the brain and the central nervous system interact with, and are affected by, each of these substances Erickson discusses current and emerging treatments for

chemical dependence, and how neuroscience helps us understand the way they work. The intent is to encourage an understanding of the body-mind connection. The busy clinical practitioner will find the chapter on how to read and interpret new research findings on the neurobiological basis of addiction useful and illuminating. This book will help the almost 21.6 million Americans, and millions more worldwide, who abuse or are dependent on drugs by teaching their caregivers (or them) about the latest addiction science research. It is also intended to help addiction professionals understand the foundations and applications of neuroscience, so that they will be able to better empathize with their patients and apply the science to principles of treatment.

The Biology of Desire

Hijacking the Brain

A Revolutionary New Way of Understanding Addiction

This Naked Mind

The Craving Brain

Mechanisms and Treatment

Focuses on ambulatory care of patients adversely affected by addictive substances such as tobacco and alcohol. Topics include urine drug screening, medical withdrawal and detoxification, smoking cessation strategies, and substance abuse in adolescents, women and elderly patients.

Drugs, Brains, and Behavior

Why Addiction Is Not a Disease

Our History of Addiction

The Journal of the National Institute on Alcohol Abuse and Alcoholism