

Brain Research in Addiction Academic Press, 2017 2017 284 pages 9780128135020

Addiction to drugs and alcohol is a dynamic and multi-faceted disease process in humans, with devastating health and financial consequences for the individual and society-at-large. The transition to drug dependence is defined by neuroadaptations in brain circuits that, in the absence of drugs, mediate a variety of critical behavioral and physiological processes including natural reward, positive and negative emotional states, nociception, and feeding. About this Research Topic. Addiction to drugs and alcohol is a dynamic and multi-faceted disease process in humans, with devastating health and financial consequences for the individual and society-at-large. This richly researched book on addiction is not just for politicians, though. It is for anyone interested in today's heated debates about safe injection sites, marijuana legalization, appropriate penalties for drug crime, and other issues around drugs, including opioids. Author Maia Szalavitz recovered from cocaine and heroin addiction 25 years ago. In *Unbroken Brain*, she weaves her personal narrative with the latest science on brain chemistry and addiction physiology; the history and political underpinnings of laws on mind-altering drugs (including coffee, nicotine and alcohol); the impact addiction treatment and driven research on new drugs to combat addiction, and it has been used to advocate for access to treatment and care rather than segregation. and punishment. These aims and outcomes are well intended, and they have been beneficial in some contexts, but the narrow focus of the disease model on the neurobiologic substrates of addiction has diverted attention (and research funding) from other models. Brain Change in Addiction as Learning, Not Disease. of these learning mechanisms are necessarily unique, the brain disease model of addiction. views the progression of decreasing control as a reflection of pathologic brain changes. Addiction neuroscience explores these brain changes. The shift from impulsive (operant