Brain reward and stress systems in addiction / topic editors: Nicholas W. Gilpin and Remi Martin-Fardon

Gilpin, Nicholas W., editor
Martin-Fardon, Remi, editor

Frontiers Media SA, 2015

Monografía

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. In humans, drug and alcohol use disorders (i.e., abuse and dependence) are defined by clusters of behavioural symptoms that can be modelled to various degrees in animals. Hallmark behavioural symptoms associated with drug and alcohol dependence are compulsive drug use, loss of control during episodes of drug use, the emergence of a negative emotional state in the absence of the drug, and chronic relapse vulnerability during drug abstinence. The transition to drug dependence is defined by neuroadaptations in brain circuits that, in the absence of drugs, mediate a variety of critical behavioural and physiological processes including natural reward, positive and negative emotional states, nociception, and feeding. Chronic drug exposure during the transition to dependence spurs (1) within-systems changes in neural circuits that contribute to the acute rewarding effects of the drug and (2) recruitment of brain stress systems (neuroendocrine and extra-hypothalamic).There are substantial genetic contributions to the propensity to use and abuse drugs, and drug abuse is highly co-morbid with various other psychiatric conditions (e.g., anxiety disorders, major depressive disorder) that may precede or follow the development of drug use problems. Across drugs of abuse, there are overlapping and dissociable aspects of the behavioural and neural changes that define the transition to dependence. Even within a single drug, people abuse drugs for a variety of reasons. The picture is further complicated by the fact that humans often abuse more than one drug concurrently. Even in the face of these challenges, pre-clinical and clinical research is making exponential gains into understanding the neurobiology of drug addiction. With the advent of new technologies and their combination with traditional approaches, the field is able to ask and answer addiction-related research questions in increasingly sophisticated ways. Here, we hope to assemble a collection of articles that provide an up-to-the-moment snapshot of the prevailing empirical, theoretical and technical directions in the addiction research field. We encourage submissions from all investigators working to understand the neurobiology of addiction, especially as it pertains to reward and stress pathways in the brain

Título: Brain reward and stress systems in addiction topic editors: Nicholas W. Gilpin and Remi Martin-Fardon

Editorial: France Frontiers Media SA 2015

Descripción física: 1 online resource (184 pages) illustrations; digital, PDF file(s)

Mención de serie: Frontiers Research Topics

Nota general: Bibliographic Level Mode of Issuance: Monograph

Bibliografía: Includes bibliographical references

Restricciones de acceso: Open Access. Unrestricted online access star

Detalles del sistema: Mode of access: internet via World Wide Web

Lengua: English

ISBN: 9782889193080 ebook)

Autores: Gilpin, Nicholas W., editor Martin-Fardon, Remi, editor

---

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es