

EDITORIAL

Entangled in addiction

Enredados en la adicción

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Addiction is a highly complex disease that requires a multidisciplinary approach. More than 20 years ago, researchers in the field of addictions, but with different professional profiles, began to establish a collaborative network that obtained funding from the Carlos III Health Institute (ISCIII). This project continues to receive funding and remains active today.

The RIAPAd, or Research Network on Primary Care in Addictions (formerly RTA or Addictive Disorders Network), is currently composed of 19 research groups distributed across 10 autonomous communities in Spain. These include numerous clinical and preclinical research groups, as well as groups dedicated to prevention and epidemiology. The Network is dynamic: although some groups have been involved since the beginning, others have merged or withdrawn, and many have joined over the years.

Through this multidisciplinary approach, the goal of RIAPAd is to improve the health and well-being of individuals and families affected by addiction. From each of our professional areas, all groups contribute to this overarching objective.

This special volume of *Adicciones* serves as a showcase for some of the work conducted within RIAPAd. We have focused particularly on basic or preclinical studies, as we aim to highlight the lesser-known aspects of the research we undertake. One of the great achievements of the network has been its ability to interconnect and strengthen our research through collaborative work. Most preclinical groups engage in extensive collaborations among themselves, but our efforts go further: the Network also facilitates collaboration among basic, clinical, and prevention-focused groups. The translation of basic research findings to specialists working from different perspectives in addiction, as well as to service users and society at large, is one of the essential goals we seek to achieve within RIAPAd.

The articles included in this volume focus on the main objectives pursued by the network. The article by the group led by Dr. Fernando Rodríguez de Fonseca explores the surprising protective role that exposure to a stressor during adolescence may exert by modifying the neurobiological correlates of alcohol use (*Prior stress history shapes adolescent alcohol-induced transcriptional changes in striatal glutamatergic and*

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Another objective of RIAPAd is the monitoring of the evolution of addictive disorders, which is addressed in the collaborative article by the groups of Dr. Laura Orio and Dr. Gonzalo Herradón. Their study examines the pleiotrophin/PTPRZ neurotrophic pathway in the hippocampus of rats exposed to chronic alcohol consumption and/or

thiamine deficiency (*Study of the Pleiotrophin/PTPRZ neurotrophic pathway in the hippocampus of rats exposed to chronic alcohol consumption and/or thiamine deficiency*).

Numerous groups are working on the development of new treatments for addiction. The group led by Dr. Marta Torrens presents a preliminary clinical trial evaluating the role of isoflavones in the treatment of cocaine use disorder (*Soy isoflavones for the treatment of cocaine use disorder: an open-label pilot study*). The group of Dr. Marta Rodríguez-Arias addresses the treatment of stress-induced cocaine use through the consumption of small amounts of a high-fat diet (*Blocking the increased reinforcing effects of cocaine induced by social defeat: effects of palatable food*). Finally, the role of omega-3 fatty acids in mitigating alcohol-induced alterations of the endocannabinoid system following binge drinking during adolescence is examined by the group of Dr. Inmaculada Gerrikagoitia (*Omega-3 fatty acids mitigate long-lasting disruption of the endocannabinoid system in the adult mouse hippocampus following adolescent binge drinking*).

One of RIAPAd's most important areas of interest—aligned with the European Drugs Agency—is research with a gender perspective. For this reason, two articles on this essential aspect of addiction are included in this special volume. A review conducted collaboratively by the groups of Dr. Antonio Vidal and Dr. Judit Tirado focuses on vulnerability to addiction from a gender perspective (*The influence of sex and gender factors on the modulation of vulnerability to addictions: a narrative review*). Finally, the group led by Dr. Orio examines how alcohol binge drinking may affect cognitive function and emotional responses depending on the sex of the animals (*Sex differences in emotional and cognitive tasks in adolescent rats exposed to alcohol binges and controls*).

We hope that this volume enables readers of the journal to become familiar with our network and to gain first-hand knowledge of the preclinical studies currently under way. Translating findings into clinical practice is often challenging, and we are fully aware of the difficulty of achieving similar results in our laboratories and in clinical settings—perhaps even more so when dealing with such a multifaceted condition as addiction. Nevertheless, preclinical research, despite its frequent limitations, offers new therapeutic targets, protective factors, or biomarkers that can open new pathways for hope and improved well-being for patients. This volume is also an effort by many basic researchers to open small windows for their colleagues—clinicians, epidemiologists, and prevention specialists—into what we can contribute to their work.

We look forward to welcoming you to RIAPAd:

<https://riapad.es/>