

Resource Summary Report

Generated by PRECISE-TBI on Sep 19, 2026

New Science of Addiction: Genetics and the Brain

RRID:SCR_002770

Type: Tool

Proper Citation

New Science of Addiction: Genetics and the Brain (RRID:SCR_002770)

Resource Information

URL: <http://learn.genetics.utah.edu/content/addiction/>

Proper Citation: New Science of Addiction: Genetics and the Brain (RRID:SCR_002770)

Description: A physiologic and molecular look at drug addiction involving many factors including: basic neurobiology, a scientific examination of drug action in the brain, the role of genetics in addiction, and ethical considerations. Designed to be used by students, teachers and members of the public, the materials meet selected US education standards for science and health. Drug addiction is a chronic disease characterized by changes in the brain which result in a compulsive desire to use a drug. A combination of many factors including genetics, environment and behavior influence a person's addiction risk, making it an incredibly complicated disease. The new science of addiction considers all of these factors - from biology to family - to unravel the complexities of the addicted brain. * Natural Reward Pathways Exist in the Brain: The reward pathway is responsible for driving our feelings of motivation, reward and behavior. * Drugs Alter the Brain's Reward Pathway: Drugs work over time to change the reward pathway and affect the entire brain, resulting in addiction. * Genetics Is An Important Factor In Addiction: Genetic susceptibility to addiction is the result of the interaction of many genes. * Timing and Circumstances Influence Addiction: If you use drugs when you are an adolescent, you are more likely to develop lifetime addiction. An individual's social environment also influences addiction risk. * Challenges and Issues in Addiction: Addiction impacts society with many ethical, legal and social issues.

Abbreviations: New Science of Addiction

Resource Type: data or information resource, disease-related portal, narrative resource, portal, topical portal, training material

Keywords: drug abuse, drug delivery, drug, drug of abuse, environmental risk factor, genetic factor, genetics, addiction, gene, treatment, brain, brain circuit, pathway, human, lesson plan, neuron, reward pathway, spanish, teacher, chronic disease

Related Condition: Substance-Related Disorder

Funding: NIDA 1 R25 DA 15461

Availability: Free

Resource Name: New Science of Addiction: Genetics and the Brain

Resource ID: SCR_002770

Alternate IDs: nif-0000-00430

Record Creation Time: 20220129T080215+0000

Record Last Update: 20260912T195546+0000

Ratings and Alerts

No rating or validation information has been found for New Science of Addiction: Genetics and the Brain.

No alerts have been found for New Science of Addiction: Genetics and the Brain.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 3 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Ekhtiari H, et al. (2024) World addiction medicine reports: formation of the International Society of Addiction Medicine Global Expert Network (ISAM-GEN) and its global surveys. *Frontiers in psychiatry*, 15, 1230318.

Chudler EH, et al. (2014) Explain the brain: websites to help scientists teach neuroscience to the general public. *CBE life sciences education*, 13(4), 577.

Liu D, et al. (2011) Where do new medicines come from? *CBE life sciences education*, 10(2), 135.