

# Brains on the Range

October 2009

Volume 1, Issue 2

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### Addiction

by ST Age 21  
C2C Client

#### Disease, Manipulation, Deceit, Cunning, Power, Discomfort, Irritable, Distress

#### A path I have gone down for years

Bringing me nothing but deceit, dishonor, disloyalty, unfaithfulness

Not recognizing my true colors

Living a lie beyond comprehension

Manipulating to every extreme  
Cheating myself to uncertainty.

Values become invaluable  
Naive being a fresh seed  
Having a sense of who I was  
became senseless rapidly

Caring about anything and anybody doesn't even strike me

Burning rage and fire I truly do feel was hidden way beneath the surface

Masking and hiding deep from the real truth.

Grateful for the path I've gone down puts me where I am at today.

### Seven Neurotransmitters C2C Measures to Break the Cycle of Addiction

**Epinephrine-** Adrenaline—fight or flight response

**Norepinephrine-** Modulates neurotransmitter firing

**Serotonin-** Controls moods, compulsions, anxiousness, headaches

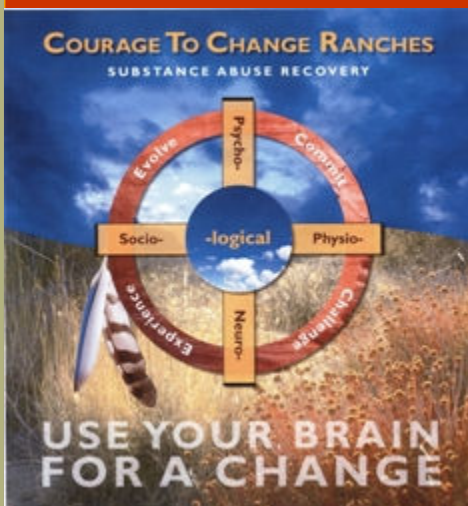
**Dopamine-** Controls pleasure/reward pathways (addiction/thrills) memory and motor skills

**GABA-** Prevents overstimulation

**PEA-** Promotes energy and elevated mood

**Glutamate-** Promotes brain function, memory and learning

## The Brain and Addiction by Dr. Judith Miller



Combining Science with  
Holistic Modalities  
in  
Addiction Recovery  
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Many people come to C2C for addiction recovery with a prior diagnosis of bi polar disorder, anxiety, anxiety attacks, clinical depression, and schizophrenia. It should be recognized that the symptoms that symptoms of the disease of addiction. We have heard that there is an unwritten rule somewhere that states that addicts should not be diagnosed with a mental health disorder while on the drugs of their addiction.



C2C does not treat symptoms. C2C recognizes that addiction is a disease of the brain and many uncomfortable symptoms are experienced by the addict. C2C has made an amazing discovery in that if the neurotransmitters (neurological system) becomes balanced, so does the endocrine system, the cardiovascular system, the circulatory system, the digestive system, the muscular system, i.e., all the bodily systems. What is most amazing is that when all the bodily systems are balanced there are no my symptoms of anxiety, depression, mood swings, and they are not Bi Polar.

Of course this is not to say that an addicted person may not be suffering from a mental health disorder. What we must do is in the guise of behavioral health, attempt to isolate and understand the symptoms and their causes and treat the causes – not the symptoms.

## What are Neurotransmitters?

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A growing number of healthcare practitioners and patients are looking for more effective ways to address today's most common health issues.



In our ever expanding understanding of human health, we have come to the realization that our health is never as simple as it may seem. There is an interconnectedness between the different biological systems in the body, just as there is in our external environment. Our understanding of these relationships requires a new approach to health- a systems approach- whereby the impact of each human biological system is evaluated in relationship to each other, not in isolation.

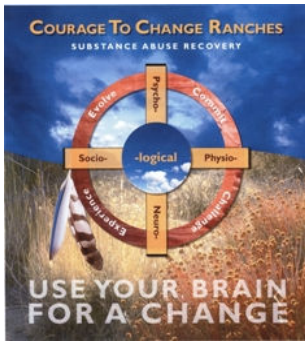
Neurotransmitters are the chemical messengers of the nervous system, essential for relaying signals within the brain and communicating with all other organ systems of the body.

Our nervous system influences how we think, feel, and act, as well as how the rest of our body functions. At NeuroScience, Inc. we believe the function of the central nervous system, including a balance of neurotransmitters, plays an essential and central role in the health of all body systems.

We advocate an assess-address approach to nervous system function. This process entails laboratory assessment of the body's chemical messengers, via urinary neurotransmitter and salivary hormone testing. Based on the laboratory results, NeuroScience, Inc. works with healthcare providers to develop Targeted Amino Acid Therapy (TAATTM) programs designed to address the spectrum of neurotransmitter and hormone imbalances.

Courage to Change Ranch is successfully working with the NeuroScience, Inc. in measuring neurotransmitter levels in relation to breaking the cycle of addiction. C2C is gathering essential data which will be used as research to substantiate the NIDA premise that addictions are a disease of the brain.

In the November issue of Brains on the Range, we will discuss the importance of administering amino acid supplements to regulate and balance neurotransmitter levels as a part of the addiction recovery process.



In 2009, the most abused drugs by teens and young adults are benzodiazepines, ADHD medication and antidepressants. Illegal psychiatric drug use has now out-distanced the street drugs of old.

Of the 220 million people taking an antidepressant 22 million will suffer severe withdrawal side effects.

Abuse of amphetamines may lead to dependence. Misuse may cause sudden death and serious cardiovascular adverse events.

[The Road Back Program](#)

### November Issue of Brains on the Range

#### Why Study Drugs and Addiction?

#### Use of Amino Acid Supplements to Repair Neurotransmitter Damage

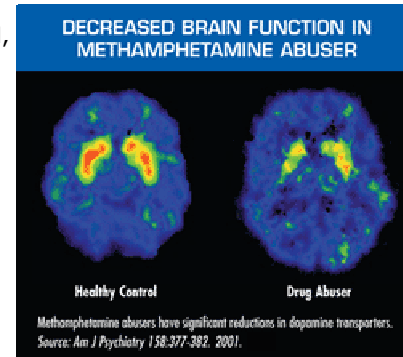
## Drugs and the Brain

Drugs are chemicals. They work in the brain by tapping into the brain's communication system and interfering with the way nerve cells normally send, receive, and process information. Some drugs, such as marijuana and heroin, can activate neurons because their chemical structure mimics that of a natural neurotransmitter. This similarity in structure "fools" receptors and allows the drugs to lock onto and activate the nerve cells. Although these drugs mimic brain chemicals, they don't activate nerve cells in the same way as a natural neurotransmitter, and they lead to abnormal messages being transmitted through the network.

Other drugs, such as amphetamine or cocaine, can cause the nerve cells to release abnormally large amounts of natural neurotransmitters or prevent the normal recycling of these brain chemicals. This disruption produces a greatly amplified message, ultimately disrupting communication channels. The difference in effect can be described as the difference between someone whispering into your ear and someone shouting into a microphone.

### What happens to your brain if you keep taking drugs?

Just as we turn down the volume on a radio that is too loud, the brain adjusts to the overwhelming surges in dopamine (and other neurotransmitters) by producing less dopamine or by reducing the number of receptors that can receive and transmit signals. As a result, dopamine's impact on the reward circuit of a drug abuser's brain can become abnormally low, and the ability to experience any pleasure is reduced. This is why the abuser eventually feels flat, lifeless, and depressed, and is unable to enjoy things that previously brought them pleasure. Now, they need to take drugs just to bring their dopamine function back up to normal. And, they must take larger amounts of the drug than they first did to create the dopamine high - an effect known as tolerance.



From the National Institute on Drug Abuse  
The Science of Addiction "Drugs and the Brain"

**We now have a way to determine when the brain is moving towards greater balance and regulation.**

**Dr. Robert Thatcher**  
Director NeuroImaging Applied Neuroscience Laboratories  
Applied Neuroscience, Inc., St. Petersburg, Florida  
Neuroconnections Fall 2009

## How I Found the Courage to Change October Recovery Client of the Month

### Meet Chris R. Oletski from Denver- 48 years old and burned out on drugs, alcohol and life.

Chris started doing illegal drugs at the age of 21. His repertoire included heroine, cocaine and alcohol. In 1990 at the age of 30, Chris was diagnosed as bipolar and in addition to his illegal drugs was prescribed Tarazadone (sleep aid), Prozac (anti-depressant), Paxal (anti-depressant) and Depecote (mood swings).

Meet Chris today - 48 years old and renewed, refreshed and off of drugs. Not just the hard core street drugs that took control of his life and damaged his brain, but off of all of the prescription drugs that further complicated his recovery. (See Judith article) Chris now understands that drugs and alcohol were tearing his life a part. In fact, since he has been at the ranch, Chris has gained 25 lbs. and thoroughly enjoys the home cooked, freshly prepared meals. He has even taken part in meal preparation as is the responsibility of all clients.

Chris feels that for the first time he is doing right by his body and that his liver no longer has to bear the burden of all the



### 60 Days—60 Lifetimes and on the Road to Recovery

**"I would recommend this place to anyone. C2C is different than most drug treatment centers where they just run you through to fill the beds."**

chemicals that he was ingesting while on his medications and through drug and alcohol use.

Chris states that: "This place has changed me - and it mostly due to the staff who work at C2C. The staff really cares about you here. I am glad that I had the courage to come here."

When asked what his goals were after leaving Courage to Change, Chris said: "I am going to stay clean and am going to enjoy life being straight."