

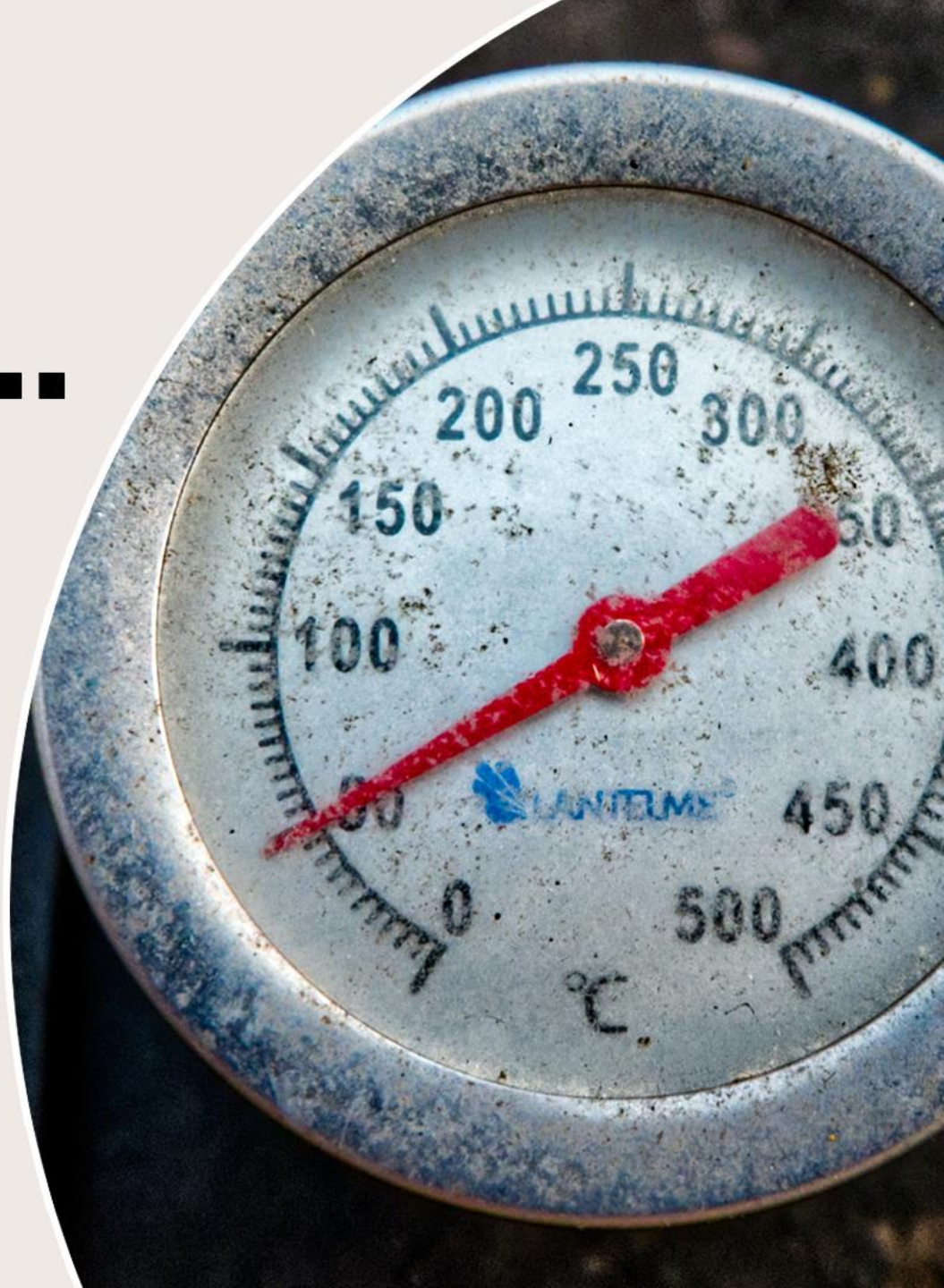
REBELLION & EXPERIMENTATION...

PART TWO: FROM THERMOMETER TO THERMOSTAT



Coalition of Alcohol and Drug Educators

Dalgarno
INSTITUTE



EXPERIMENTATION OR HOW TO MAKE YOURSELF A 'THERMOMETER'!

Some Science – “Several emerging theories of addiction have described how abused substances exploit vulnerabilities in decision-making processes. These vulnerabilities have been proposed to result from pharmacologically corrupted neural mechanisms of normal brain valuation systems.

High alcohol intake in rats during adolescence has been shown to increase risk preference, leading to suboptimal performance on a decision-making task when tested in adulthood...”

Risk preference following adolescent alcohol use is associated with corrupted encoding of costs but not rewards by mesolimbic dopamine <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3069180/pdf/pnas.201017732.pdf>

EXPERIMENTATION OR HOW TO MAKE YOURSELF A 'THERMOMETER'!

“A history of adolescent alcohol use alters dopamine signaling to risk but not to reward. Thus, a corruption of cost encoding suggests that adolescent alcohol use leads to long-term changes in decision making by altering the valuation of risk.

Risk preference following adolescent alcohol use is associated with corrupted encoding of costs but not rewards by mesolimbic dopamine...”

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3069180/pdf/pnas.201017732.pdf>



APPRAISAL DISRUPTION

JOURNEY OF PSYCHOPHARMACOLOGY

<http://jop.sagepub.com/content/26/2/221.abstract>

Neural Mechanisms of Risk Taking and Relationships with Hazardous Drinking

“The current results suggest that risk taking is associated with increased response in the dACC (dorsal anterior cingulate cortex) and anterior insula, regions previously implicated in representing error likelihood and negative outcome magnitudes, respectively. In addition, hazardous drinking was associated with responses in the dACC, ...suggesting a reduced ability to predict the likelihood of errors and to predict negative outcomes associated with risk taking.”

(Feb 2012) <http://onlinelibrary.wiley.com/doi/10.1111/j.1530-0277.2011.01694.x/abstract>

APPRAISAL DISRUPTION

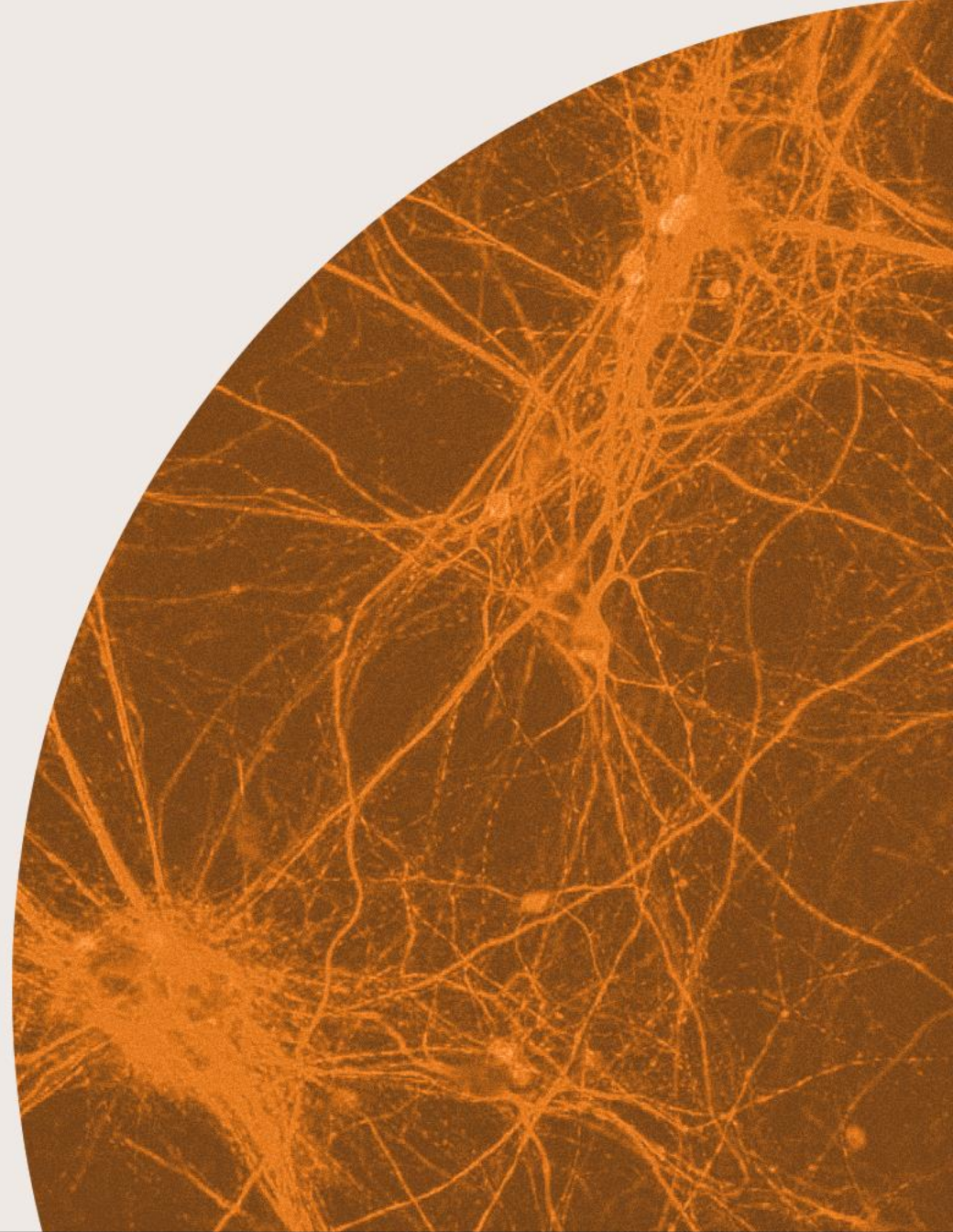
JOURNEY OF PSYCHOPHARMACOLOGY

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We understand from some of the latest research that the granule cells in the brain, over 60 Billion, can be encoded by reward responses, not just the anticipated rewards either. Unexpected rewards in recent experiments, saw increases in reward response, thus driving greater 'cellular need' for reward.

Cerebellar granule cells encode the expectation of reward

www.nature.com/nature/journal/v544/n7648/full/nature21726.html



APPRAISAL DISRUPTION

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This is good news and bad news!

When you introduce artificial ‘Rewards’ such as ‘chemical buzz’, the **RECIPE** is getting messed with and your **resiliency rope** and **developmental wheelbarrow** get poor, damaged or disruptive messaging and coding.

So, if you already have few boundaries, poor values and toxic relationship in play, then many of the positive rewards your bio-brain system really needs are missing or corrupted – it’s easy to see how your **REWARD** mechanism is set up to be hijacked, especially by substances.

““ QUOTE OF THE MOMENT””



““
I AM ABLE TO CONTROL ONLY
THAT WHICH I AM AWARE OF.
THAT WHICH I AM UNAWARE
OF CONTROLS ME –
AWARENESS EMPOWERS ME.””

SIR JOHN WHITMORE
– AUTHOR AND
COACHING PIONEER””

“FIXING THE DISRUPTION.”

Stuffing ‘you’ up is a lot easier than fixing you – that’s why it’s so important to make smart choices now!

However, if you’ve ‘dabbled’ then intervening now is vital.

Of course, **‘fixing’ this mess is doable**, but as we’ll discover it is a tough road to repair and much of the things you should have learned and missed because you were ‘rebellious’, all have to be relearned, as the following reveals.

Cerebellar granule cells encode the expectation of reward

<http://www.nature.com/nature/journal/v544/n7648/full/nature21726.html>

“FIXING THE DISRUPTION.”

However, the capacity to encode those cells to ‘delay’ reward was only achieved through active learning processes. (use of meds won’t help you relearn)

Again, even at a cellular level, we were designed to explore and find best outcome/reward, or we can ‘short circuit’ our human computer by stimulating it with non-instructing chemical ‘tutors’ that diminish our capacity to make wiser, long term decisions.

Cerebellar granule cells encode the expectation of reward

<http://www.nature.com/nature/journal/v544/n7648/full/nature21726.html>



HOW **NOT** TO SAY YES TO
CAPACITY & RESILIENCY
DIMINISHING
DRUGS



<https://www.youtube.com/watch?v=SKHJ69vvno>

REBELLION & EXPERIMENTATION. PART TWO.



**TIME TO 'PUSH BACK'!
CHANGING YOUR CONTEXT:**

BECOMING A THERMOSTAT!

**"KNOWING WHY I DON'T NEED TO, MAKES IT EASIER TO
SAY NO!"**

ENVIRONMENT

**I'M NOT GOING TO SUPPORT
AN INDUSTRY THAT IS
HELPING DESTROY OUR
PLANET AND MANY PEOPLE
GROUPS!**

MY BODY

**I'M NOT GOING TO USE GEAR
THAT IS GOING TO LET ME
BE 'USED' OR WORSE –
TURN ME INTO A USER OF
OTHERS!**

VALUES

**MINE ARE STRONGER THAN
THE THREATS – I KNOW
WHO I AM, AND WHERE I'M
GOING! AND WANT TO REACH
MY FULL POTENTIAL!
DRUGS ARE NOT PART OF
THAT JOURNEY!**

TRAFFICKING

**I'M NOT GOING TO SUPPORT
A PRODUCT THAT IS USED TO
EXPLOIT AND THEN DESTROY
WOMEN AND CHILDREN!**

VIOLENCE

**I'M NOT GOING TO USE A
PRODUCT THAT GREATLY
ADDS TO VIOLENCE, RUIN'S
HOMES AND BREAKS UP
FAMILIES!**

TIME TO PUSH BACK: CHANGING YOUR CONTEXT - BECOMING A THERMOSTAT!



TAKE-A-WAYS: SCRIPT BUILDER POINTS



I'm a Thermostat – Not a Thermometer!

- **My Body:** I'm not going to use gear that is going to let me be 'USED' or worse – turn me into a USER of others!
- **The Environment:** I'm not going to support an 'industry' that is helping destroy our planet, along with many plant and animal species.
- **Human Rights:** Human Trafficking – I'm not going to support a product that is used to exploit and then destroy women and children!
- **Violence:** I'm not going to use a product that greatly adds to violence, ruin's homes and breaks up families and destroys communities! #zerotolerance
- **Values:** Mine are stronger than the threats – I know who I am, and where I'm going! And want to reach my full potential! Drugs are not part of that journey!

Strengthening Your BUNGEE Rope – Filling Your Wheelbarrow with good stuff!

CLICK ON LINKS BELOW

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[DRUG POLICY BUILDING OR DEMOLISHING COMMUNITY RESILIENCY](#)

[SOCIAL DETERMINEANTS & SUBSTANCE USE](#)

[CANNABIS CONUNDRUM INFORMATION SHEET](#)

[VAPING CRISIS INFORMATION SHEET](#)

[STIGMA & DRUG USE – REDUCING BOTH](#)

**MORE RESOURCES FOR
BUILDING RESILIENCY
WITHOUT DRUG USE**

