



# Trauma-Informed Care and Substance Use Disorders



Remote Attendees,  
Welcome!  
Please leave your phones on  
**MUTE** – Thank You!



# Agenda

7:45 – 8:00 am	Speaker Introduction – Agenda Review – Connecting to the why of this work
8:00 – 8:30 am	Addiction Paradigms
8:30 – 9:30 am	The Neurobiology of Trauma
9:30 – 9:45 am	Break
9:45 – 10:45 am	Neurobiology of Trauma as it pertains to Substance use Disorders
10:45 – 11:00 am	Addiction Paradigms Review
11:00 – 11:30 am	Basic Principles of Trauma-Informed Care as they pertain to Substance Use Disorders
11:30 – 12:30 pm	Lunch
12:30 – 1:45 am	Common Clinical Scenarios in SUD care
1:45 – 2:00 pm	Goodbyes, grounding and close out



# Trauma-Informed Care and Substance Use Disorders

**Lydia Anne M Bartholow,  
DNP, PMHNP, CARN-AP**



# Who am I?

- Nurse first (DNP, PMHNP, CARN-AP)
- Recently retired Director, now a “Co-occurring Consultant”
- Person in long-term recovery



# Housekeeping

- Bathrooms are.....?
- Snacks and Water
- Fidget toys
- Breaks & Lunch

9:30 AM – 9:45 AM

11:30 – 12:30 Lunch



# Agreements

## Large group...

- Move up, move back
- Engage in group activities as tolerated
- Close attention to time for group activities
- Tend to yourself: get water, go to the bathroom, move your body, skip activities, etc.
- Assumptions in this room:
  - Pharmacotherapies for Addiction are legitimate avenues to recovery
  - Trauma is not just an individual experience, it is rooted in cultural and societal influences



# Connecting to the Why

Activity: Turn to partner and share:

1. One time you felt most like yourself in the past week?
2. Why do you do the work you do?

No more than 4 minutes  
(2 minutes each, to share)





# Connecting to the Why

## Snacking on Mindfulness



# Addiction Paradigms

Trauma-informed care for SUD is built on changing the narrative of what causes addiction.

What is the dominant narrative (or paradigm) on what causes addiction and who “addicts” are?



# Addiction Paradigms

## Activity

As a table...

1. Pick a scribe
2. write down the dominant narratives on what causes addiction and who “addicts” are?
3. Get as many as you can in 10 minutes



# The Neurobiology of Trauma:101



First, what is trauma?





# What do you notice in your body?

## Activity:

Jot down as many feelings in your body as possible.

Get as many as you can in 3 minutes



# Initial signs and symptoms of the stress response:

(aka fight, flight or freeze or HPA axis)

Blurred vision

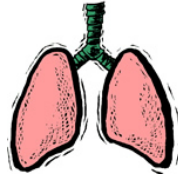


Muscle tension



Increased heart rate

nausea



Inability to focus/  
think straight

Sweaty palms

Increased blood pressure



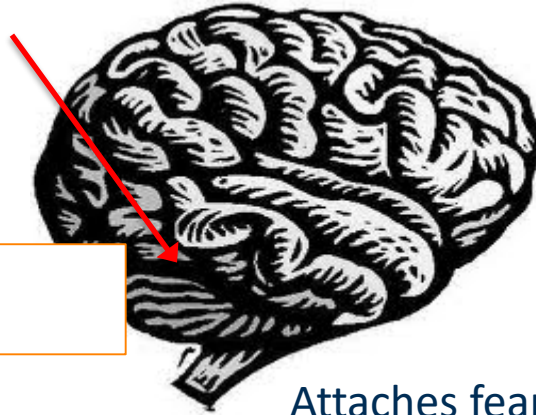
shaky

Thoughts of impending doom



# Stressor or Threat:

(cop in rearview mirror)



Amygdala

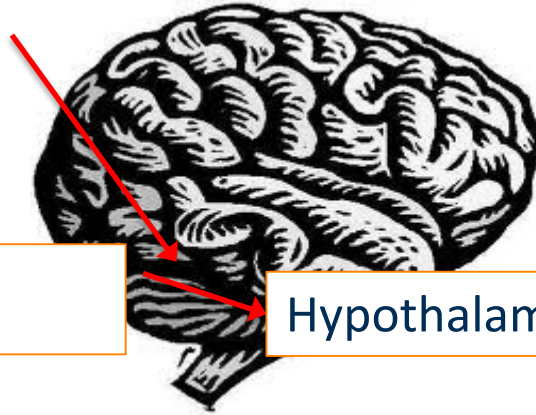
Attaches fear to stimuli





# Stressor or Threat:

(cop in rearview mirror)



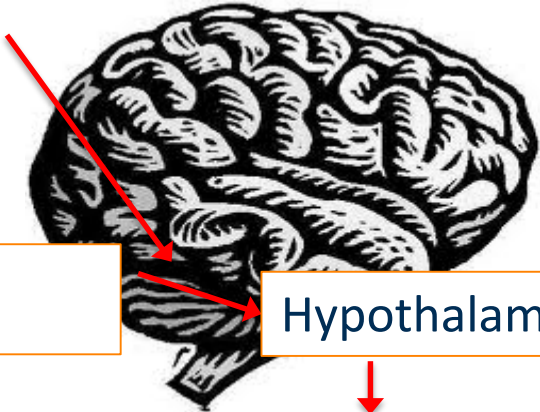
Amygdala

Hypothalamus



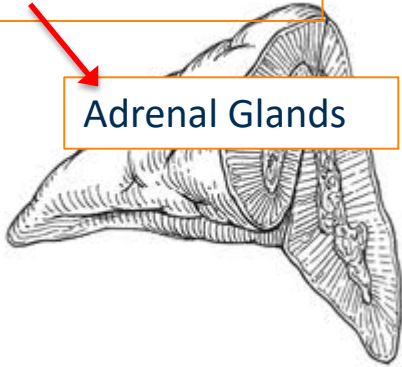
**Stressor or Threat:**  
(cop in rearview mirror)

**Amygdala**



**Hypothalamus**

**pituitary**



**Adrenal Glands**

Direct stimulation of  
fight or flight neurons



# Stressor or Threat:

(cop in rearview mirror)

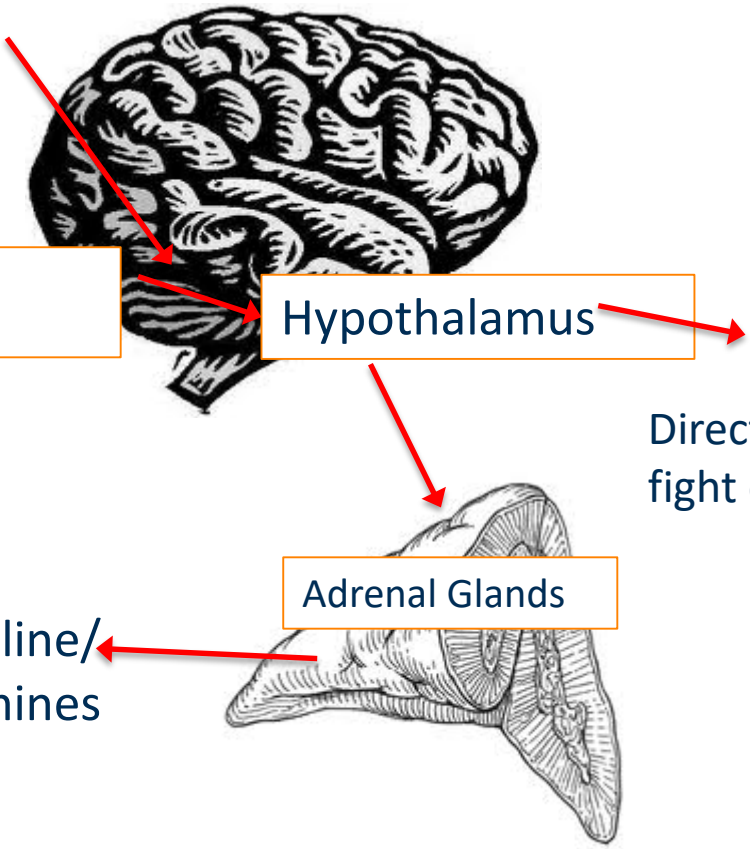
Amygdala

Hypothalamus

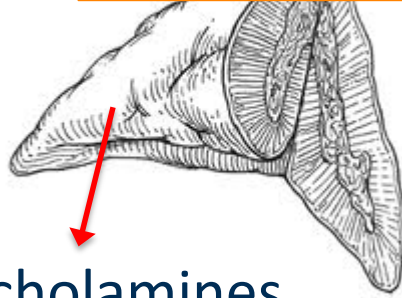
Adrenal Glands

adrenaline/  
catecholamines

Direct stimulation of  
fight or flight neurons



## Adrenal Glands

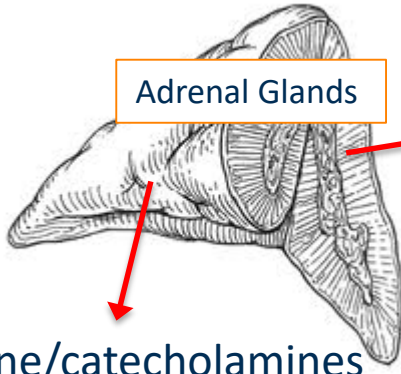


## adrenaline/catecholamines

- pupil dilation
- sweat
- dried out mucous membranes
- muscle contractility
- increased HR
- increased BP
- blow flow away from stomach
- blow flow away from prefrontal cortex
- blood flow to vital organs
- increased blood sugar

+ new neuronal  
connections about  
fearful stimuli!





Adrenal Glands

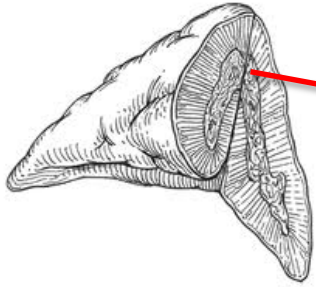
cortisol

adrenaline/catecholamines

- pupil dilation
  - sweat
  - muscle contractility
  - increased HR
  - increased BP
  - blow flow away from stomach
  - blow flow away from brain
  - blood flow to vital organs
  - increased blood sugar
- immune system suppression
  - suppression of inflammation
  - water retention
  - hyperglycemia
  - insulin resistance
  - muscle breakdown
  - increased gastric juices
  - removal of calcium from bones

*+ irritability, mood swings,  
aggression!*





## Affects of long term cortisol...

- immune system suppression/suppression of inflammation =
- water retention =
- hyperglycemia =
- fat redistribution =
- decreased gastric integrity =
- Thyroid down regulation =
- decreased serotonin (for some people) =
- dopamine dysregulation in the NA =





## Affects of long term cortisol

-- immune system suppression/suppression of inflammation =

-- water retention = High Blood Pressure  
Cardiac Disease

-- hyperglycemia =

Diabetes

Autoimmune disease  
Cancer

-- fat redistribution =

IBS / Food sensitivities / ETC

-- decreased gastric integrity =

-- Thyroid down regulation = hypothyroidism

-- decreased serotonin (for some people) =

DEPRESSION

-- decreased dopamine =

Addiction



# Allostatic load

Privilege	Oppression
White folks	Folks of Color
Cisgendered folks	Transgender folks
Higher SES	Lower SES
Straight Folks	LGBTQI Folks
Men	Women

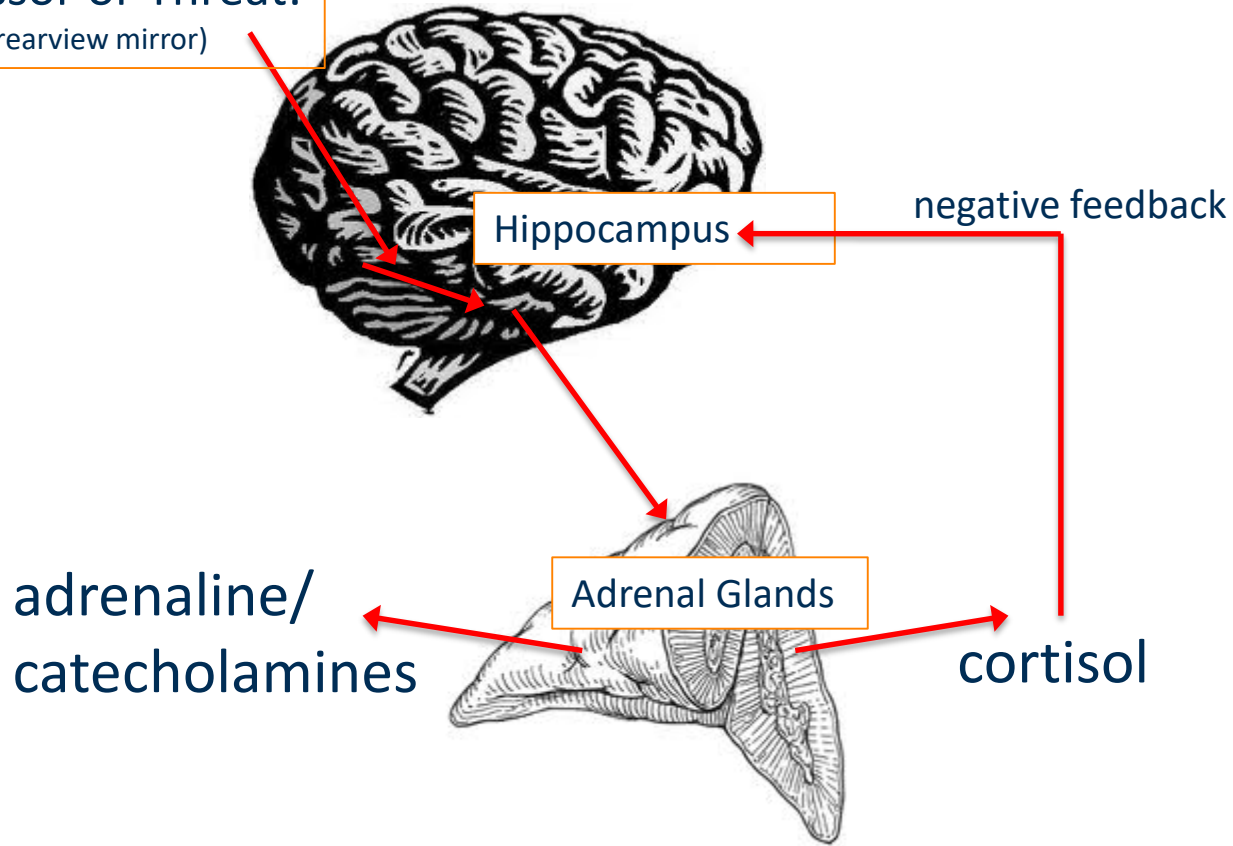
Who's more likely to have higher levels of cortisol?

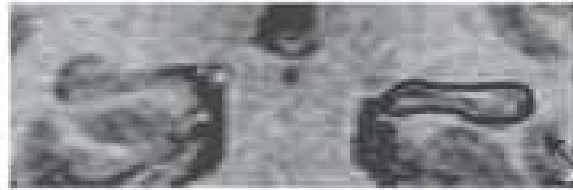
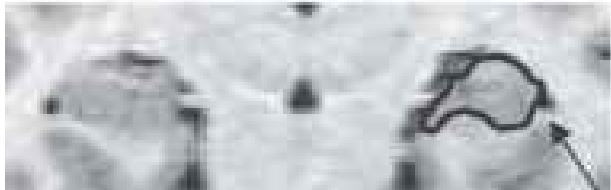
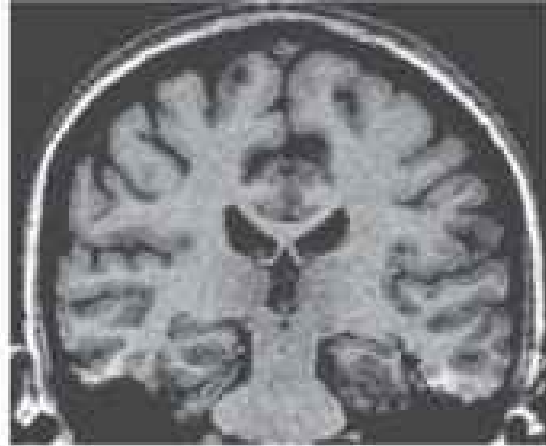
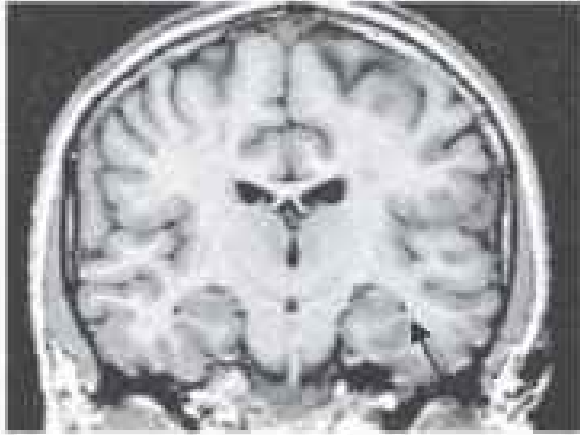
McEWEN, B. (2001). Stress, Adaptation, And Disease: Allostasis And Allostatic Load. Annals of the New York Academy of Sciences, 33-44.





**Stressor or Threat:**  
(cop in rearview mirror)







Hippocampal shrinkage allows for LOSS of inhibition to the fight, flight, fawn system, meaning that survivors are consistently in a fight, flight, freeze or fawn state.

*The loss of inhibition comes from loss of soothing to the amygdala.*

## Stressor or Threat:

(cop in rearview mirror)



**Amygdala**

The amygdala is responsible for turning on fight, flight, freeze or fawn AND:

1. Engaging with prefrontal cortex and telling it to activate, or not
2. Engaging with all body systems and instructing them to calm, or activate
3. Engaging with sleep centers and instructing arousal or rest
4. Engaging with pain centers and increasing pain threat or decreasing it



Break

35  
Br e a k

Return to seats by \_\_\_\_\_



# Neurobio of Trauma as it Pertains to SUD

Childhood trauma increases the risk of addiction (specifically IV drug use) in adulthood by **4600%**. [Felitti, 2004]



# ASAM Definition Update!

Addiction is a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, ***and an individual's life experiences.*** People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences.

- ASAM, 2019



# ACEs Study



ACE Pyramid, Centers for Disease Control 2014



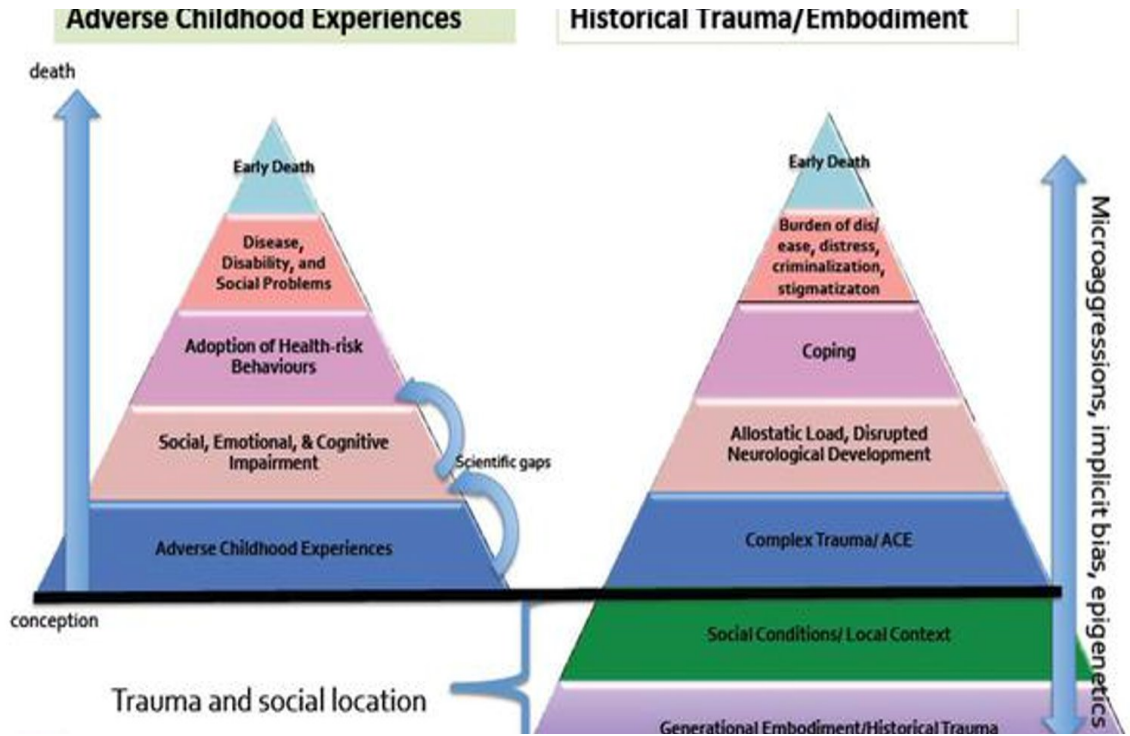


# ACEs Study

- Who, or what, is left out of the ACES study?



# ACEs Study



RYSE Center, 2015



## Stressor or Threat:

(cop in rearview mirror)



**Amygdala**

The amygdala is responsible for turning on fight, flight, freeze or fawn AND:

1. Engaging with prefrontal cortex and telling it to activate, or not
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## Stressor or Threat:

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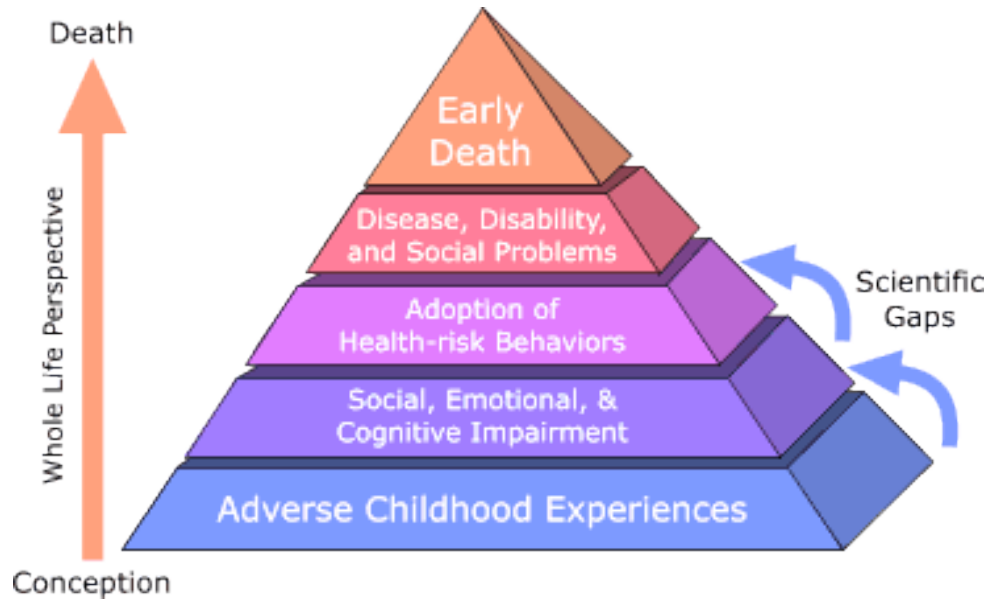
**Amygdala**

The amygdala is responsible for turning on fight, flight, freeze or fawn AND:

1. **Engaging with prefrontal cortex and telling it to activate, or not**
2. Engaging with all body systems and instructing them to calm, or activate
3. Engaging with sleep centers and instructing arousal or rest
4. Engaging with pain centers and increasing pain threat or decreasing it



# ACEs Study



ACE Pyramid, Centers for Disease Control 2014



# Trauma -> SUD neuro-vulnerability (1)

- **1. Executive functioning and Self-soothing**

A brain that has not experienced trauma can self-soothe; a central nervous system that has experienced trauma will look to outside sources to soothe





## Executive Functioning Is Responsible for:

- *Emotion Regulation*
- *Inhibitory Control*
- *Self-monitoring*
- *Paying Attention*
- *Planning and organizing*





# Trauma -> SUD neuro-vulnerability (2)

- **2. Dopamine hyper-sensitivity**

The CNS that has experienced trauma is hyper-sensitive to the power of dopamine

(Bloomfield, 2019; Society of Neuroscience, 2018; Teadway, 2019)



# Trauma -> SUD neuro-vulnerability

But first, what is dopamine?

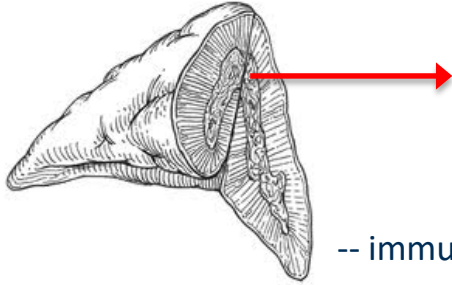
Dopamine says:  
Find it. Remember where it is. Go back again.

- Learning
- Memory
- Survival

**Saliience!**

(via pleasure/reward)



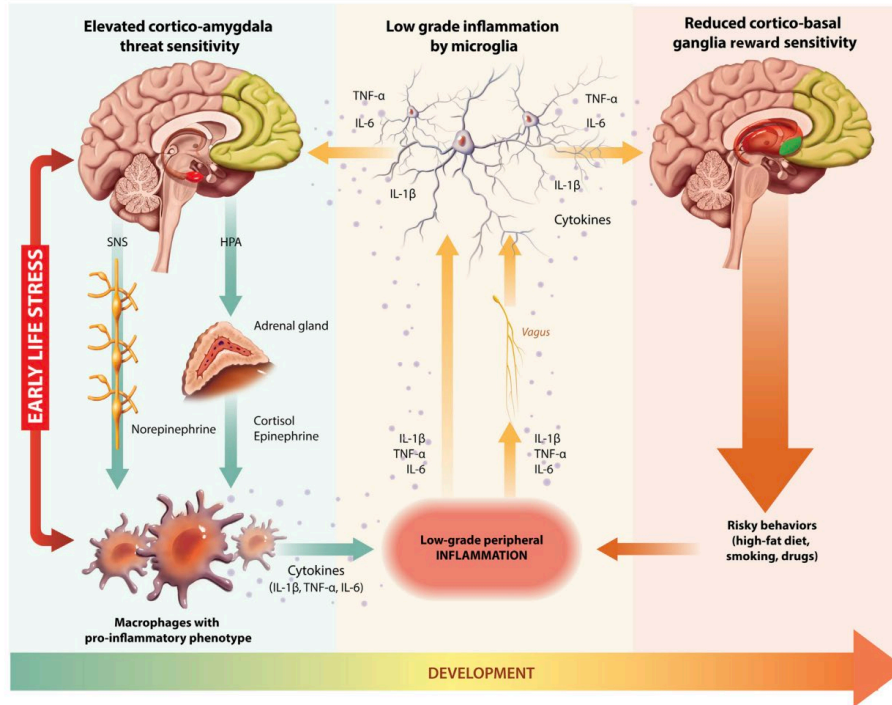


## Affects of long-term cortisol...

- immune system suppression/suppression of inflammation =
- water retention =
- hyperglycemia =
- fat redistribution =
- decreased gastric integrity =
- Thyroid down regulation =
- decreased serotonin (for some people) =
- **dopamine dysregulation in the NA =**



# Neurobiological Vulnerability

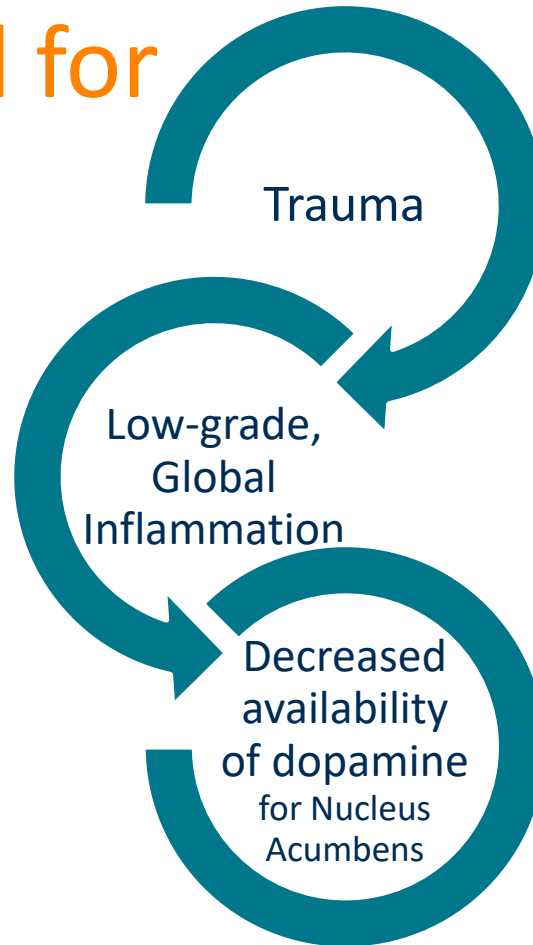


**Figure 1.** Depiction of neuroimmune network hypothesis. HPA, hypothalamic-pituitary-adrenocortical; IL-1 $\beta$ , interleukin-1 $\beta$ ; IL-6, interleukin-6; SNS, sympathetic nervous system; TNF- $\alpha$ , tumor necrosis factor-alpha. Illustration by Chi-Chun Liu and Qingyang Chen.

Nusslock, R., & Miller, G. E. (2015).



# Theoretical Model for Dopamine Deficit



# Theoretical Model for Dopamine Deficit

- Trauma -> cortisol dysregulation
- Cortisol dysregulation -> Inflammation
- Inflammation -> Dopamine deficit
- **Dopamine deficit = hypersensitivity to dopamine's power**



# Teach-Back Activity



Take 2.5 minutes to teach this to your neighbor, then switch.

5 minutes total.



# Trauma -> SUD neuro-vulnerability (3)

- Similar neurohormonal landscape (esp. in withdrawal):
  - excessive CRF, NE. Impaired DA and 5HT.





# Trauma -> SUD neuro-vulnerability (4)

- Amygdala has exceptionally high concentration of opioid receptors [Zubieta, 2001]



# Trauma-SUD Connection

- “Ritualized compulsive comfort seeking”
  - Dr. Daniel Sumrok, MD



# Addiction Paradigms

## Activity

As a table...

1. Pick a NEW scribe
2. Write down the trauma-informed and science savvy narratives on what causes addiction and who “addicts” are?
3. Get as many as you can in 10 minutes



# Trauma-Informed Care 101

- “Trauma-informed care is a strengths based framework that is grounded in an understanding of and responsiveness to the impact of trauma, that emphasizes physical, psychological, and emotional safety for both providers and survivors, and that creates opportunities for survivors to rebuild a sense of control and empowerment.”

(Hopper, Bassuk, & Olivet, 2010)

- A focus on the experience, not just the outcomes



# Trauma-Informed Care 101

## Agenda

- Language
- Trauma-Informed vs Trauma-Specific
- SAMSHA's Principles
- Core Tenets



# TIC language

Recovery Dialects	Mutual Aid Meetings	In Public	With Clients	Medical Settings	Journalists
<b>Addict</b>	✓	STOP	STOP	STOP	STOP
<b>Alcoholic</b>	✓	STOP	STOP	STOP	STOP
<b>Substance Abuser</b>	STOP	STOP	STOP	STOP	STOP
<b>Opioid Addict</b>	✓	STOP	STOP	STOP	STOP
<b>Relapse</b>	✓	STOP	STOP	STOP	STOP
<b>Medication Assisted Treatment</b>	STOP	STOP	STOP	STOP	STOP
<b>Medication Assisted Recovery</b>	✓	✓	✓	✓	✓
<b>Person w/ a Substance Use Disorder</b>	✓	✓	✓	✓	✓
<b>Person w/ an Alcohol Use Disorder</b>	✓	✓	✓	✓	✓
<b>Person w/ an Opioid Use Disorder</b>	✓	✓	✓	✓	✓
<b>Long-term Recovery</b>	✓	✓	✓	✓	✓
<b>Pharmacotherapy</b>	✓	✓	✓	✓	✓

Language matters but can change depending on the setting we are in. Choosing when and where to use certain language and labels can help reduce stigma and discrimination towards substance use and recovery.

SOURCE: Ashford, R. D., Brown, A. M., & Curtis, B. (2018). Substance use, recovery, and linguistics: The impact of word choice on explicit and implicit bias. *Drug and Alcohol Dependence*, 189, 131–138.

\*\*Preference for “recurrence of use” rather than “relapse”.



# Trauma-Informed Care 101

Trauma-Informed Care	Trauma-Specific Care
Universal precautions and systems-oriented interventions	Treats disorder in an individual
Builds trauma attentive systems for cts and staff	Attends to specific symptoms in an individual (e.g. prazosin for nightmares)
Changes how we think about and understand the pathology	Uses trauma therapies such as Brain Spotting, EMDR, etc.



# SAMSHAs

## Key Principles

1. Safety
2. Trustworthiness and Transparency
3. Peer Support
4. Collaboration and Mutuality
5. Empowerment, Voice and Choice
6. Cultural, Historical, and Gender Issues





# And a few more..

- Just Care (proportional to vulnerability)
- Individualized care
- Highly rewarding care  
(love as contingency management)
- Care with an emphasis on harm-reduction
- Low-Barrier care



# Case Studies 1

- **Wardell and Relapse Prevention**

Wardell has been through SUD recovery services multiple times. He says he already completed the relapse prevention curriculum that you use multiple times and he could “probably teach it”. As a trauma informed service provider, you:

A) Tell him he needs to take it again. It clearly didn’t work for him since he’s back in your services. Also, everyone needs to complete the same program. You can’t “work your own program”.

B) Allow him to replace the relapse prevention curriculum with an alternate recovery activity (e.g. MH sessions, acupuncture, etc.)

C) Offer to allow him to teach the class, he needs to prove he knows the material before he is let off the hook



# Case Studies 1a

- Allowing Wardell to replace the relapse prevention skills class with another activity is an example of what element of trauma informed care?
  - A) Collaboration and Mutuality
  - B) Low Barrier Care
  - C) Empowerment, voice and choice
  - D) Just Care



# Case Studies 2

- **Friday PM Bupe refill & Janine**

You are a counselor in a program that includes medication supported recovery, specifically buprenorphine. Janine, a client, has not engaged with services for almost two weeks. She shows up around 4:56 on a Friday evening asking for a refill of buprenorphine. There is a script waiting for her, and she has buprenorphine in her point of service urine dip.

You should:

- A) Deny her the buprenorphine. She needs to learn to manage her time better, and she has to experience natural consequences for not engaging. When she graduates recovery services no one is going to hold her hand. Moreover, she doesn't seem very committed.
- B) Immediately grab her bupe script for her. Give her the week's worth of medicine. Tell her you are really glad she is safe and she should come back when she needs more medicine.
- C) Bridge her Buprenorphine script from Friday PM to Monday. Tell her you are so glad she is safe and you'd like to see her again Monday to do some collaborative problem solving.



# Case Studies 2a

- Allowing Janine a bridge script of buprenorphine is an example of which tenet of trauma informed care?
  - A) Highly rewarding care
  - B) Low Barrier Care
  - C) Empowerment, voice and choice
  - D) Safety



# Case Studies 3

- **Steven and Stigma**

You are an LMP in primary care, serving a population with a high rate of substance use disorders. You overhear another staff member, named Steven, discussing buprenorphine. Steven says “I don’t understand replacement therapy for addiction. It’s just a continuation of addiction, you know? And the clients are all so young and so entitled. When I was in early recovery, we just had to white knuckle it”

You...

A) Continue about your day. Who cares what other people believe?

B) Rush in to interrupt the conversation and state “Buprenorphine is the gold standard for treating opioid use disorders. Also, the clients aren’t entitled! They are traumatized, just like I am from hearing you talk this way!”

C) Allow yourself some time to reflect on the conversation. Later in the day, ask if you can talk to Steven alone and begin the conversation with curiosity. Explain why fighting stigma is so important for our clients.



# Case Studies 3a

- You decide to pull Steven aside and speak to him alone about his comments. You start the conversation with curiosity and explore what his values are. You finish by discussing stigma. Some key talking points might be:

A) Bupnorphine is evidence based medicine. LMPs are the top of the treatment pyramid and know best how to treat this disease – not people in recovery. Stigma regarding MSR kills people!

B) Buprenorphine is evidence based medicine, just like insulin for diabetes. It's important that treatment teams work together and understand how trauma can make engaging with recovery extra hard. We all share a passion for wanting people to live better lives, in alignment with their own values.



# Case Studies 4

- **Higher Level of Care & Betsy**

You are responsible for informing a client in IOP, Betsy, that she can no longer stay in the IOP setting and needs a higher level of care (residential, or maybe even a withdrawal management setting). When you have this conversation, you focus on the following key elements:

1) Concern for her safety. The ways in which the treatment team have not been able to help address her SUD in the ways in which she needs. All of the times you've enjoyed working with her.

2) Sadness that she couldn't meet her goals. Hope that she'll be ready some day to get clean. A list of phone numbers to residential facilities that take her insurance.





# Case Studies 4a

- You decide to focus on Betsy's safety and the ways in which the team failed to meet Betsy's needs. The conversation goes really well.

Which trauma-informed principle was this decision based on?

- A) Collaboration and mutuality
- B) Highly rewarding care
- C) Safety
- D) Harm reduction and low barrier access



# Case Studies 5

- **Management and Vulnerability**

You are the manager of access for your clinic. You notice that you are almost two weeks out for intake, which is far longer than you like to be. There are 9 people on the wait list. You understand that people, especially those with a history of trauma, need on demand access to care. You are able to find two additional intake slots in the coming week, you decide to do which of the following to determine who gets the intake slot.

A) You create a “waitlist group”. People who show up 4 days in a row will be given intake slots. This shows that they are really committed to recovery.

B) You review the list to see who is most vulnerable and prioritize their intakes. You ensure that everyone on the list gets access to Narcan. Vulnerability is determined by pregnancy status, DHS involvement status, route of drug use, etc.



# Case Studies 5a

- You decide to go utilize vulnerability. You pick this based on which of the following tenets and principles of trauma informed care?
  - A) Safety
  - B) Peers
  - C) Collaboration and mutuality
  - D) Just Care



# Questions & Closing

## Questions?



# Integration

## Activity: Chalk Talk

On the big papers,  
write down **ONE** thing you learned today.



# References

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# References

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# Join an Upcoming Session!

*Childhood Health: Chronic Illness and Social Complexity*

*April 30<sup>th</sup>*





Thank you!

