

Substance Use and Mental Health Disorders: Challenges for Primary Care



Ted Parran MD FACP

Carter and Isabel Wang Professor of Medical
Education

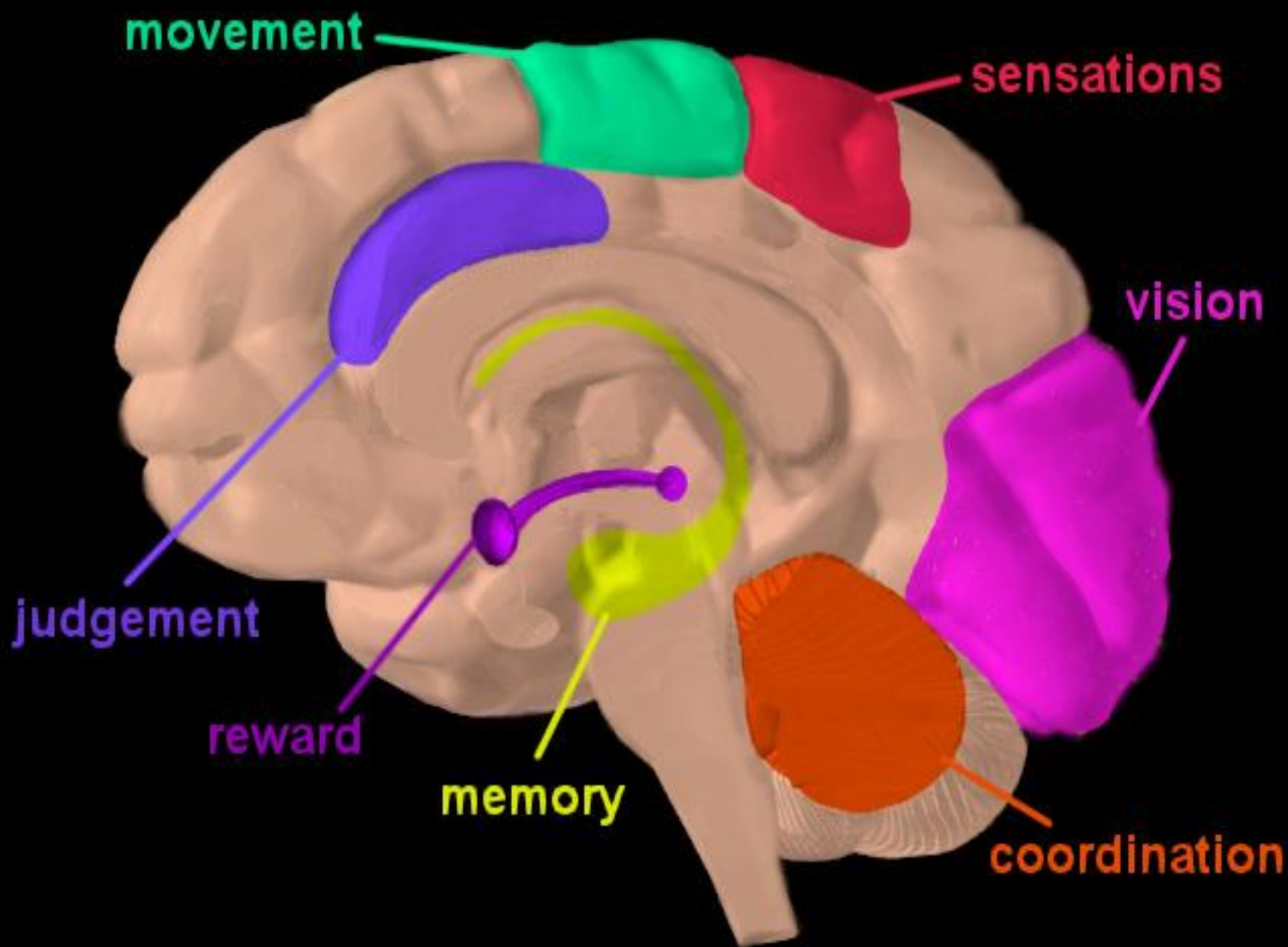
CWRU School of Medicine

typ@cwru.edu



Euphoria Producing Drugs – EPD's

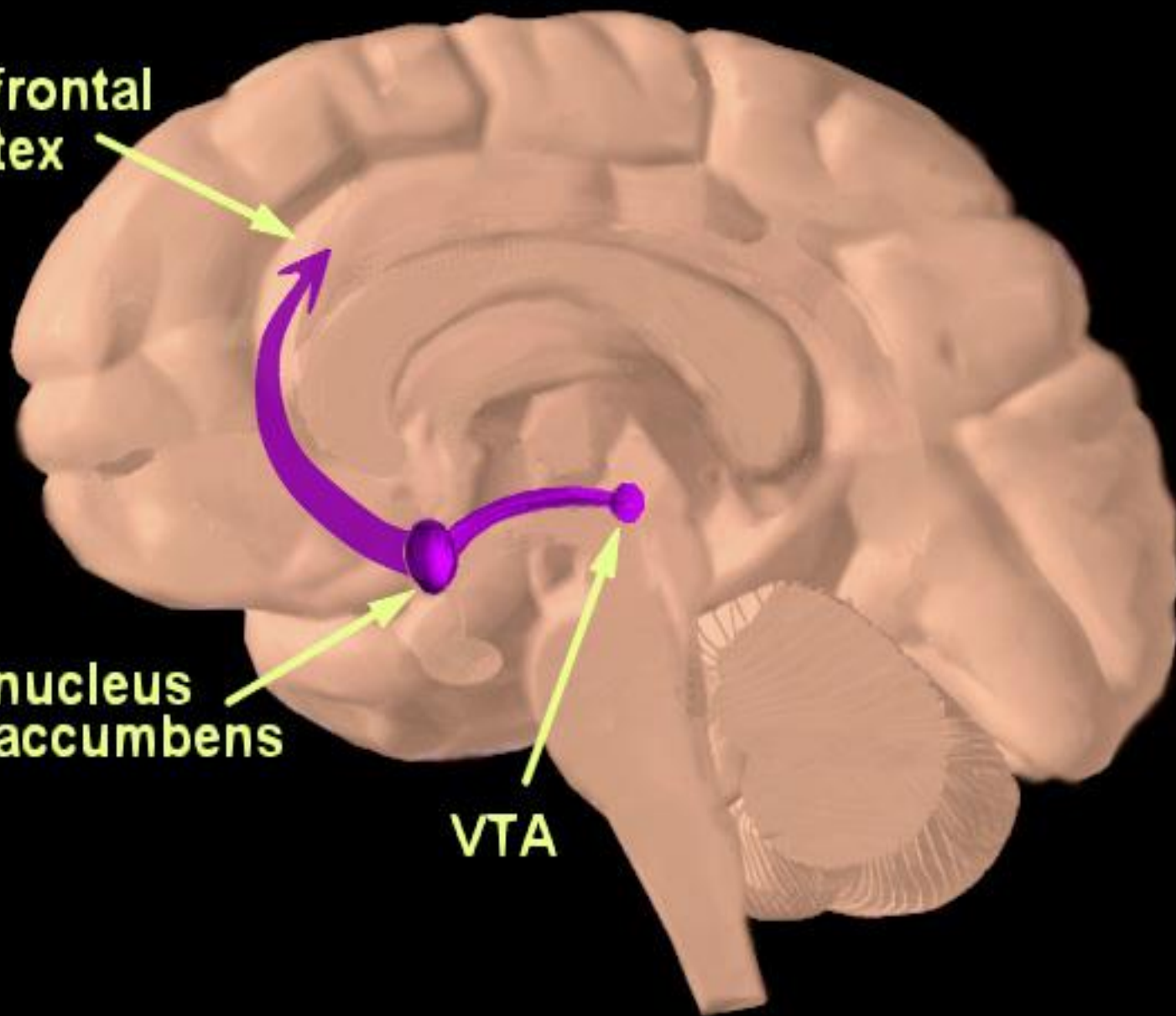
- EPD's include: opioids, stimulants, sedative-hypnotics, cannabinoids, and phencyclidine
- Very different substances
- Totally different primary brain effects
- ALL produce and acute surge of dopamine from the mid brain to the fore-brain
- Dopamine surges mediate addictive disease

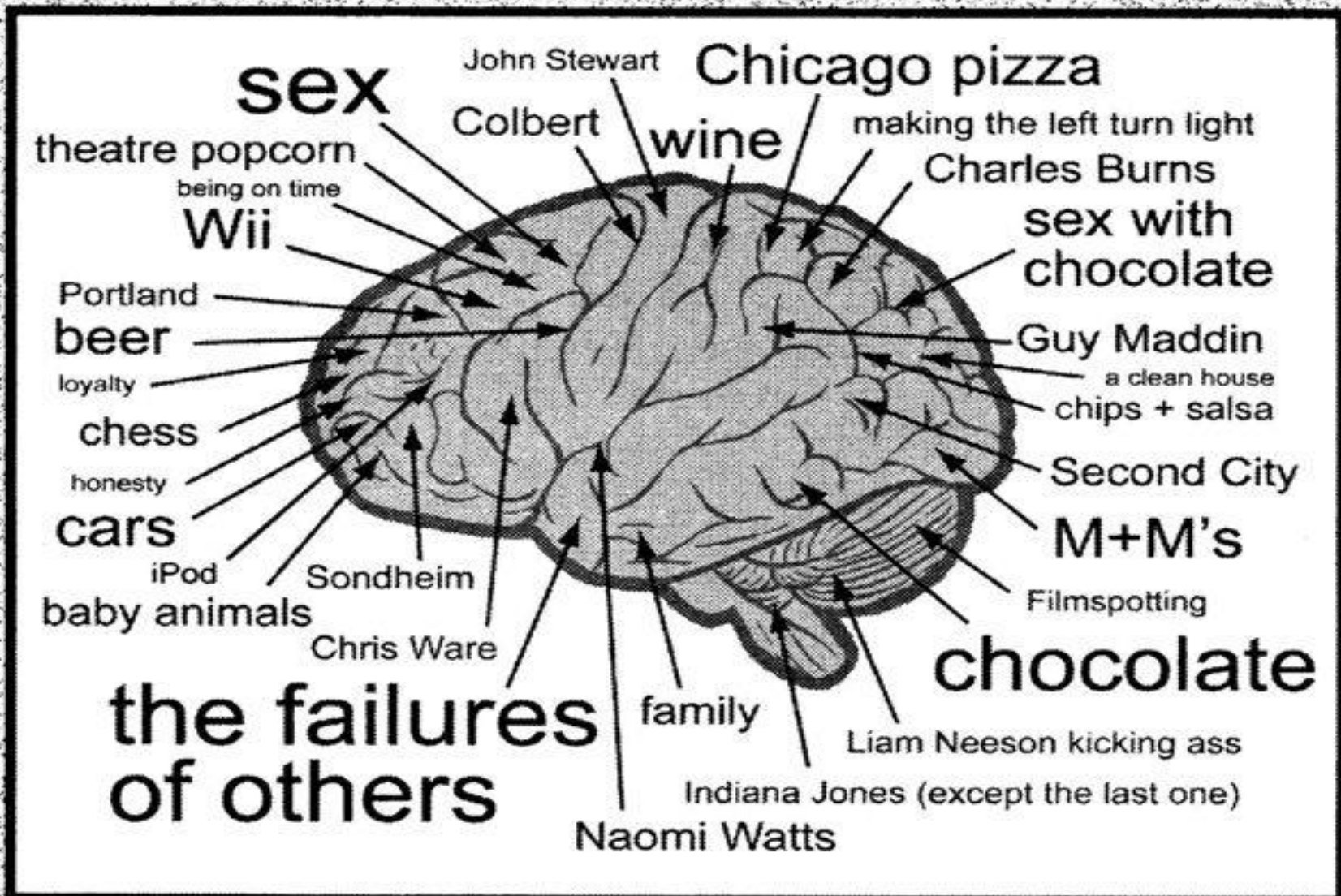


prefrontal cortex

nucleus accumbens

VTA





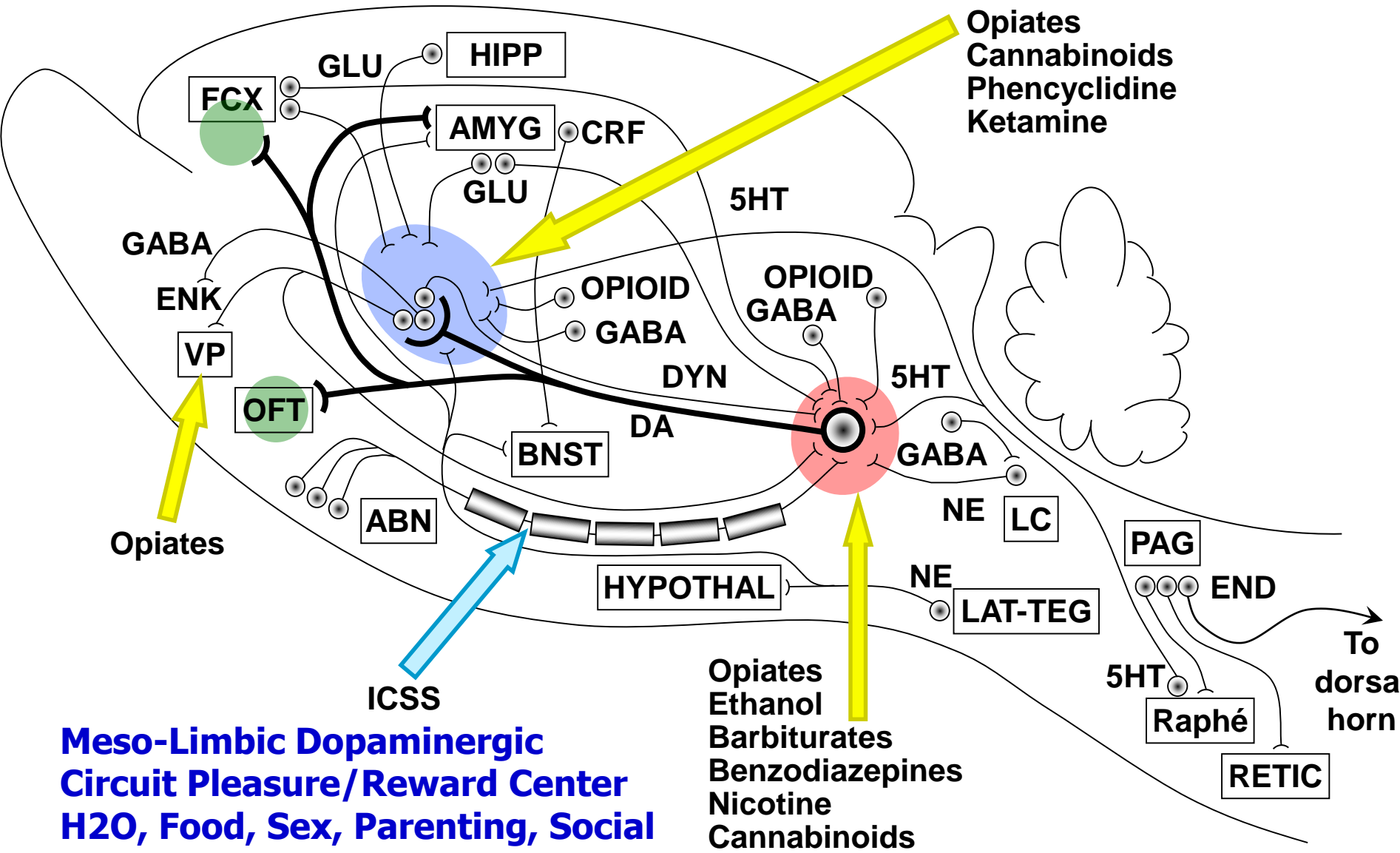
Pleasure centers

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Acc ● VTA ●

Eliot Gardner

Amphetamine
Cocaine
Opiates
Cannabinoids
Phencyclidine
Ketamine



**Meso-Limbic Dopaminergic
Circuit Pleasure/Reward Center
H2O, Food, Sex, Parenting, Social**

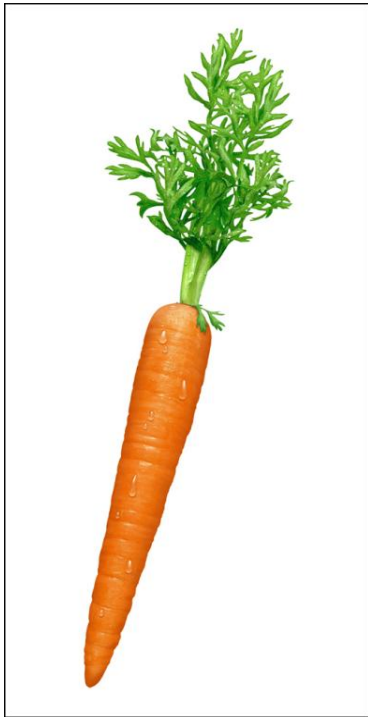
Opiates
Ethanol
Barbiturates
Benzodiazepines
Nicotine
Cannabinoids

To dorsal horn

Hedonic Tone

- Sense of well being, happiness, pleasure, contentment
- “Set” by / in the mesolimbic dopaminergic circuitry (Pleasure / Reward / Survival Center)
- Range: Euphoria ← to → Dysphoria
- Altered by Psychoactive Activities (*or Substances*)
- A Delicate Balance
- A reflection of the Human Condition
- *Abnormal tone* in those vulnerable to addiction

Hedonic Tone Demonstration



Addiction (aka SUD Mod or Severe)

- **Public Policy Statement: Definition of Addiction ASAM 2011**
- **Short Definition of Addiction:**
- **Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.**
- **Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.**

Substance Use Disorder DSM-V

- Tolerance*
- Withdrawal*
- More use than intended
- Craving for the substance
- Unsuccessful efforts to cut down
- Spends excessive time in acquisition
- Activities given up because of use
- Uses despite negative effects
- Failure to fulfill major role obligations
- Recurrent use in hazardous situations
- Continued use despite consistent social or interpersonal problems

*not counted if prescribed by a physician

Severity measured by number of symptoms; 2-3 mild, 4-6 moderate, 7-11 severe



SUD moderate or severe: a chronic (brain) disease!!

- High prevalence
- Identified risk factors
- Hints about etiology
- Predictable natural history
- Morbidity and mortality
- Good treatment efficacy
- Potential for prevention



SUD: Etiology

A Brain Disease!!!

- Brain functions:
 - Movement
 - Intelligence
 - Behavior
- Diseases of the brain in each area:
 - Parkinson's, M.S., Seizures
 - Mental retardation, Dementia
 - Addiction, Schizophrenia, Bipolar



SUD: Natural History (It's a Brain Disease)

- Brain function number 3: Behavior Control
- Diseases of the brain that effect Behavior Control Centers:
 - Addiction, Schizophrenia, Bipolar
- Sns/Sx of the **biologic** disease of addiction:
 - Behavioral, Behavioral, Behavioral ...
- Not a psychological disease



Chemical Dependence v. Axis III natural history

- Increased dysfunction and disability in the following domains:
 1. **Self image** v. Physical
 2. **Interpersonal** v. Work
 3. **Social** v. Financial
 4. **Financial** v. Social
 5. **Legal** v. (nothing)
 6. **Work** v. Interpersonal
 7. **Physical** v. Self image



Addiction as a Familial Disorder

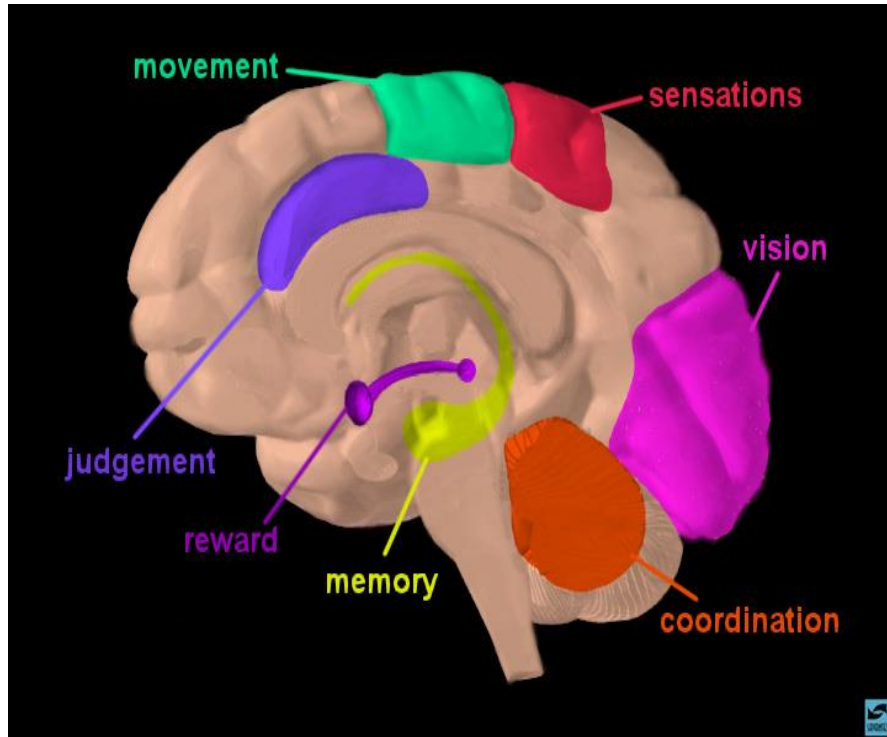
- Aristotle- “drunken women bring forth children like themselves”
- Plutarch- “one drunk begets another”
- Every study since the late 1800’s shows higher rates of addiction in relatives of alcoholics.
- 3 to 4 times higher rate in first degree relatives.



From Familial to Genetic “genes Vs. environment”

- What is the relative importance of genetic influences compared to environmental and family influences?
- Adoption studies
- Twin studies

SUD (addiction) = **abnormal** Reward Circuit



- EPD's = ***massive*** reward (dopamine) surge
- Susceptible brain
- Exaggerated euphoria
- Altered hedonic baseline
- Increased expectation of pleasure / satisfaction = cravings
- Abnl. memory of euphoria
- Immediate tolerance = "Chasing the dragon"



Psychiatric Diagnosis

- Axis I
 - Substance use disorders 13.5%
 - Depression 8-10% ... 20-40%
 - Anxiety 5-8% ... 20-30%
 - Bipolar 3% ... 15-20%
 - Schizophrenia 1% ... 10%
 - ? Schizoaffective
- Axis II – personality disorders unclear%

Importance of PSYCHIATRIC DDx in SUDs



- Relapse
- Suicide / Suicide / Suicide / Suicide
- Prescribing of controlled drugs
- Integration of assessment process
- Coordination of care
- Sequential v. parallel v. combined care
- Different care models

Importance of MEDICAL DDX in SUDs



- Acute Pain
- Chronic Pain
- ?Malignant Pain
 - Relapse
 - Prescribing of controlled drugs
 - Integration of assessment process
 - Coordination of care
 - Sequential v. parallel v. combined care



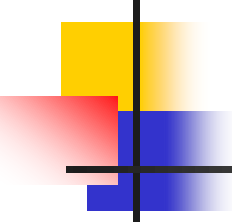
Sequential v. parallel v. combined care in DDX Patients

- History of SUDS Tx in Psych patients
- History of Psych Tx in SUDs patients
 - Approach
 - Medication options
- SAMI experiments
- New Models
 - Sequential / combined / parallel
- Implications for Medical DDX Patients



SUDs and Med/Psych DDx: Relapse

- Physician data
- Importance of good assessments
- Use of validated screening tools
- Integration in to treatment planning
- Focus during late-early and middle recovery
- Primary during sustained full recovery



SUDs and Med/Psych DDx: Controlled drug prescriptions

- Just Plain Dangerous!
- Seductive
- Patients are convinced that they are the only thing that works
- In reality other things DO work
- Stick with empathic “no” with PEARLS



DDx and SUDs critical issues

- In the mental health treatment environment substance use has been tolerated historically.
- SMI patients + even low level SU = *disaster*
- Need to focus more on SU in SMI populations



Current standard of care ~ not good!

- Most affected patients are missed
 - 50% missed on Internal Medicine inpatient.
 - >80% missed on Surgery inpatient.
 - ~90% missed in ambulatory Primary Care.
- Less than half of diagnosed have a tx. plan.
- Frequent prescribing of controlled drugs.
- Little chronic disease monitoring/mgmt.
- Much patient blaming or enabling.

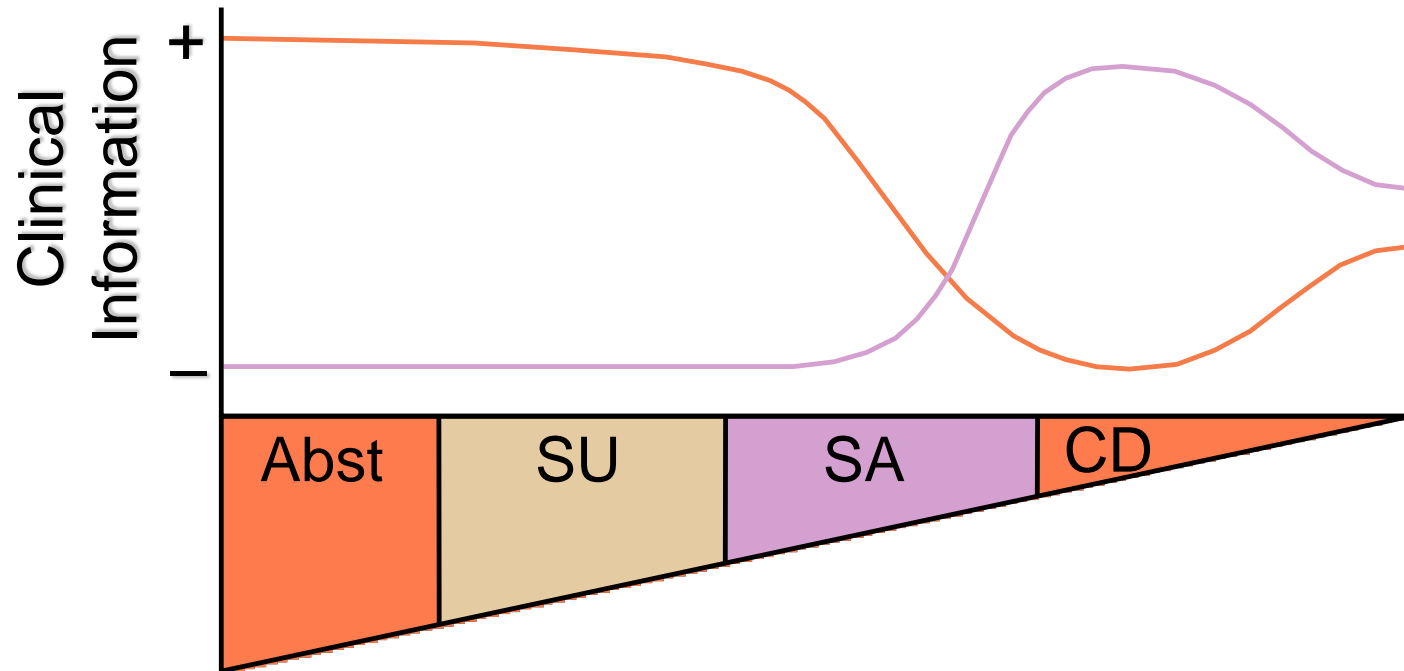


Treating Addictions as chronic illnesses- Basic Clinical Skills

- Study the natural history
- Implement screening strategies (AUDIT etc)
- Practice presenting the diagnosis (BI)
- Assess patient's readiness for change (MI)
- Negotiate treatment plans (RT)
- Develop comfort with pharmacotherapy including with saying "I am so sorry, but no"
- Strategies for long-term monitoring

Screening: Quantity and Frequency vs Patterns and Consequences

Screening Strategies – Q&F vs P&C



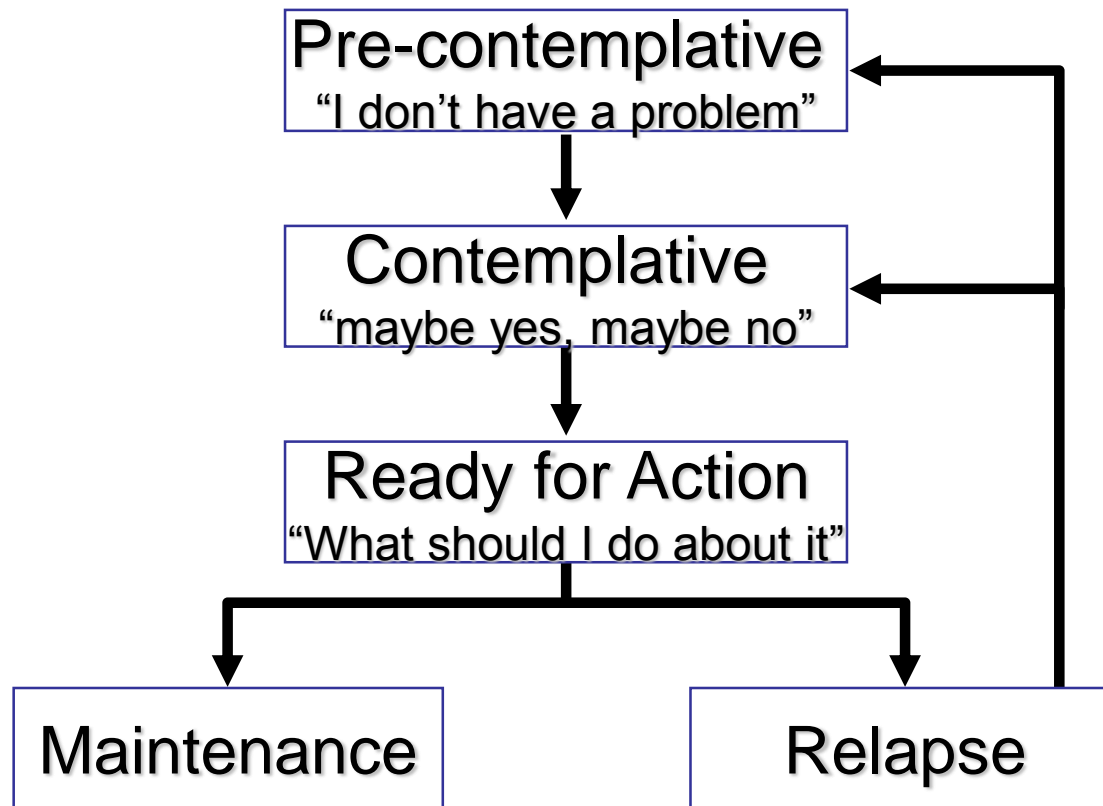


Presenting the Diagnosis: the Brief Intervention (cont.)

- “Pearls to use” - **SOAPE**
 - **S**upport (“I want to work with you”)
 - **O**ptimism (“you can and will get better”)
 - **A**bsolution (“it is not your fault for having the illness, just your responsibility to manage it”)
 - **P**lan (depends on the patient readiness for change)
 - **E**xplanatory model (“this can be hard to hear, what are your thoughts about your substance use?”)

Presenting the Diagnosis

Assessing Readiness





Negotiating a Treatment Plan Goals with a Precontemplative Patient

- Do a brief intervention
- Maintain the relationship
- Assess the stage of readiness over time

- This is a “**relational**” treatment plan (i.e. maintain the relationship)



Negotiating a Treatment Plan Goals with a Contemplative Patient

- Do a brief intervention
- Maintain the relationship
- Validate ambivalence
- Highlight dissonance
- Facilitate evolution towards action

- This is an **"educational"** treatment plan (i.e. educate the patient about the issues)



Negotiating a Treatment Plan Goals with an Action Stage Patient

- Do a brief intervention
- Assess withdrawal/suicide risk
- Identify useful past strategies
- Offer treatment options
- Monitor very very very closely

- This is a **"behavioral"** treatment plan, (i.e. asking the patient to make behavior change)



Monitoring strategy with Chemically Dependent Patients

- IF Pre-Contemplative: repeat the BI over time
- IF Contemplative:
 - Progressive patient ***and*** family education
- IF Ready for Action:
 - Document functional improvement & corroborate via SO
 - Check program attendance / self-help – sponsor - home
 - Check occasional toxicology tests
 - Avoid ALL longitudinal controlled drug prescribing (other than MAT with methadone or buprenorphine)
 - Check Pharmacy Board Web-site



Treating Addictions as chronic illnesses- the challenge

- Study the natural history
- Implement screening strategies (CAGE)
- Practice presenting the diagnosis (SOAPE)
- Assess patient's readiness for change
- Negotiate treatment plans
- Develop comfort with pharmacotherapy
- Strategies for long-term monitoring



Questions and Comments!!!

- ???????????????'s