

Opioid Use Disorder (OUD)

Opioid Summit II

PBCMS

November 2nd, 2019

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DSM-5-- Substance Use Disorder:

A maladaptive pattern of substance use leading to significant impairment or distress, as manifested by 2 or more of the following within a 12-month period

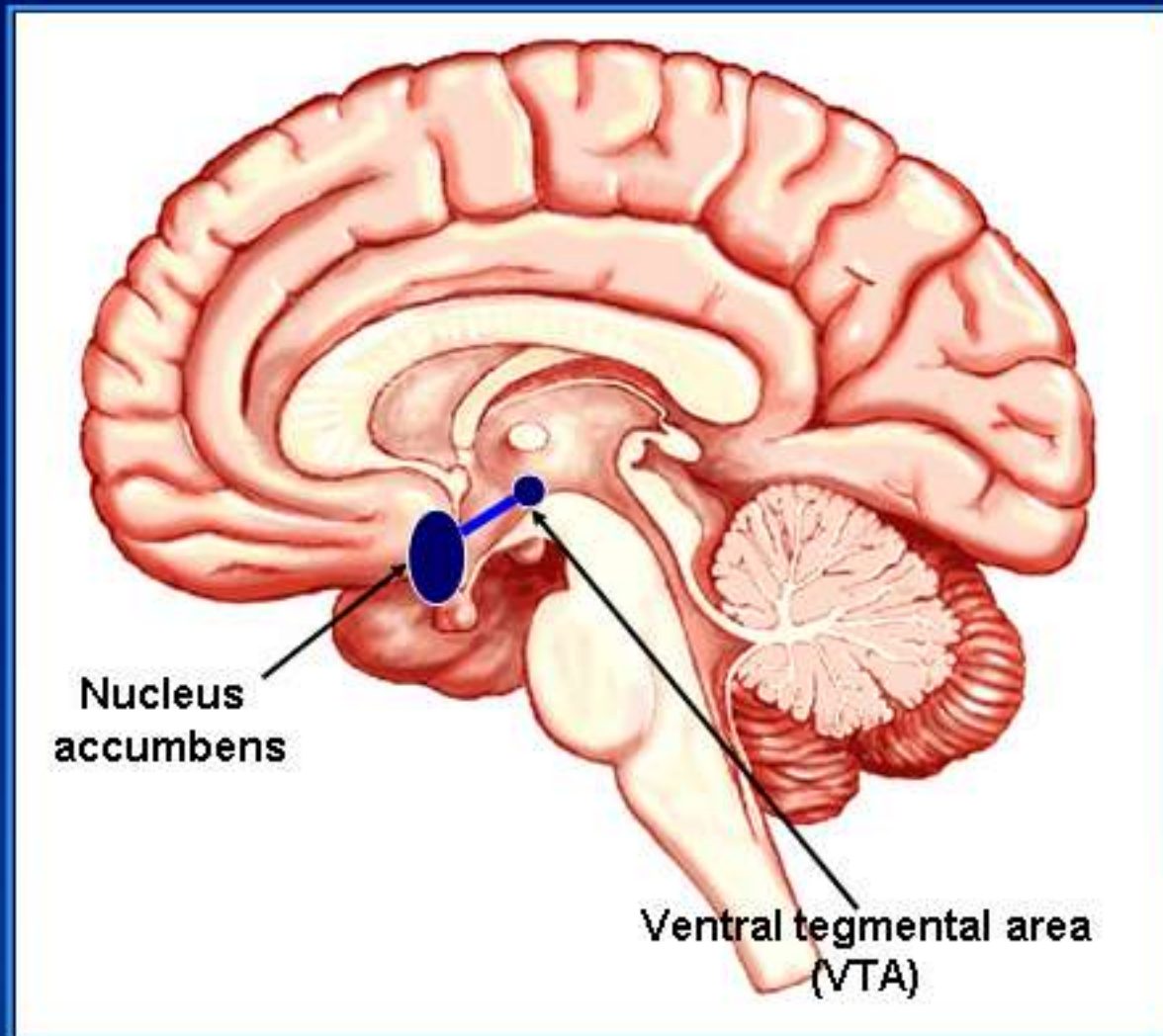
1. Using larger amounts/ longer period than intended
2. Persistent desire or unsuccessful efforts to control use
3. Great deal of time spent to obtain, use or recover from effects
4. Cravings or strong desire or urge to use
5. Recurrent use resulting in a failure to fulfill major role obligations
6. Continued use despite recurrent social or interpersonal problems
7. Stopping/reducing important social, occupational or recreational activities due to using
8. Recurrent use in physically hazardous situations
9. Use continues despite knowledge of physical/psychological problem
10. Tolerance
11. Withdrawal

Mild 2-3

Moderate 4-5

Severe 6+

Brain Reward Pathways



- The VTA-nucleus accumbens pathway is activated by all drugs of dependence including alcohol

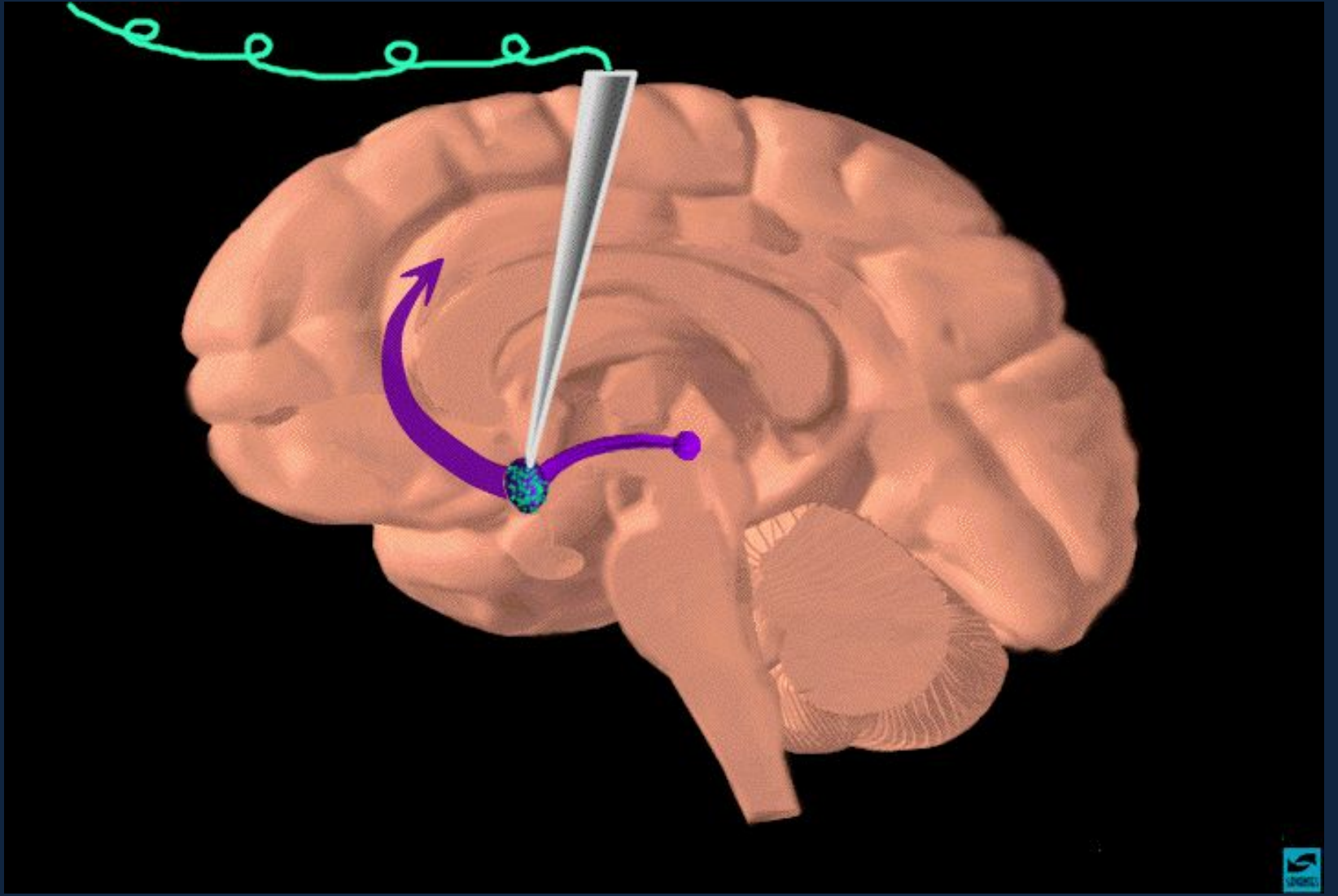
- This pathway is important not only in drug dependence, but also in essential physiological behaviors such as eating, drinking, sleeping, and sex

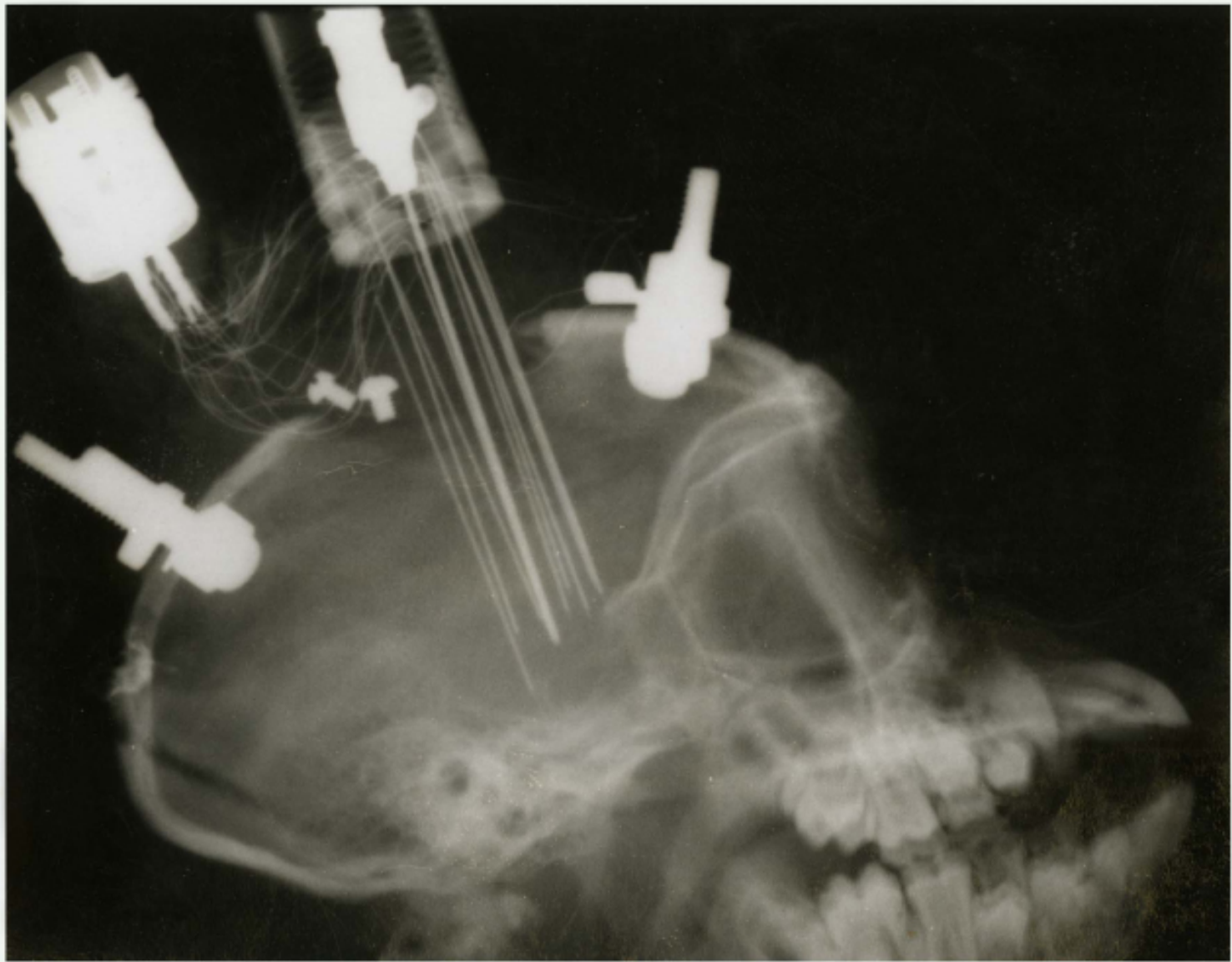
How do we know?

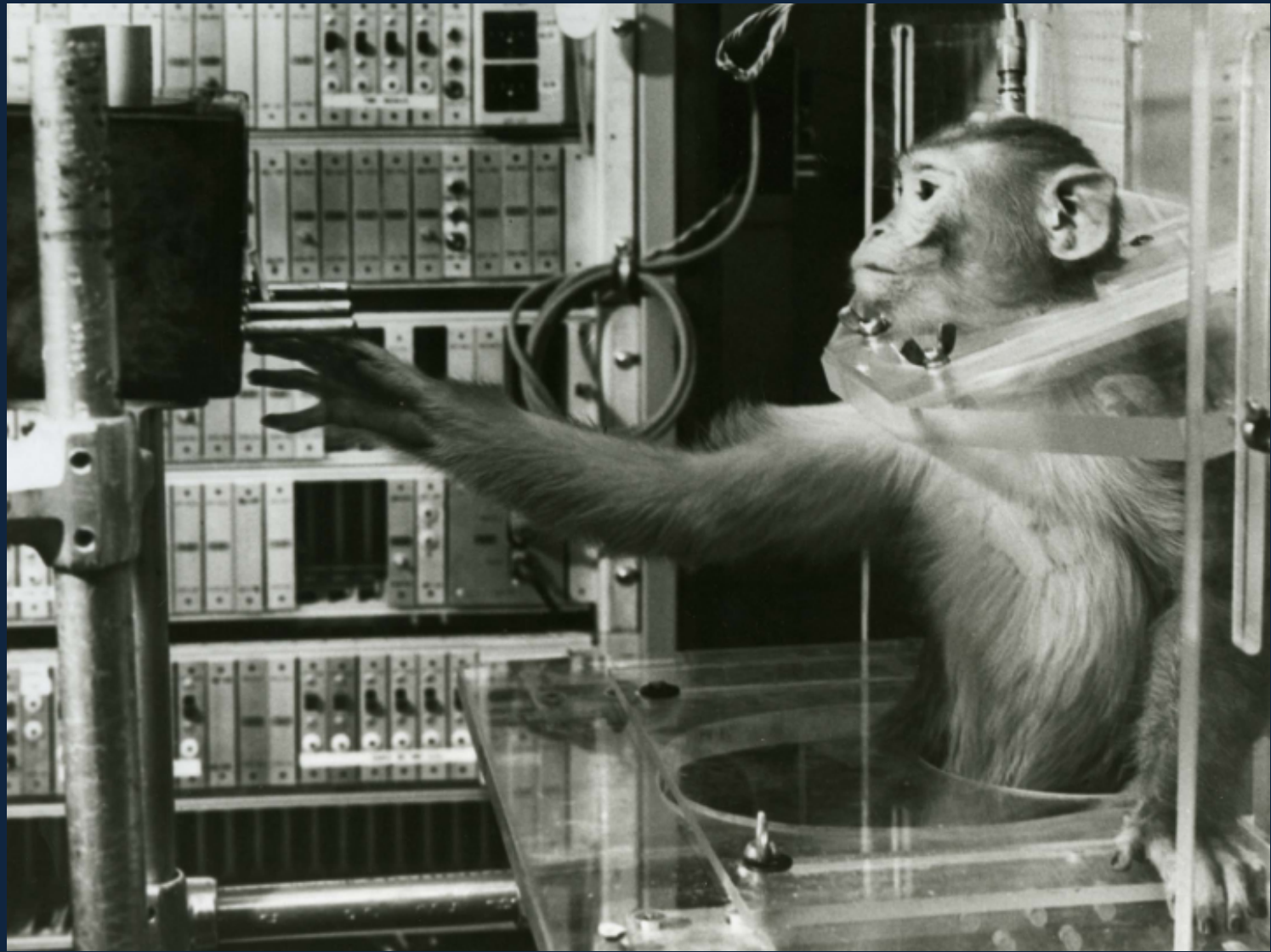
Human patients

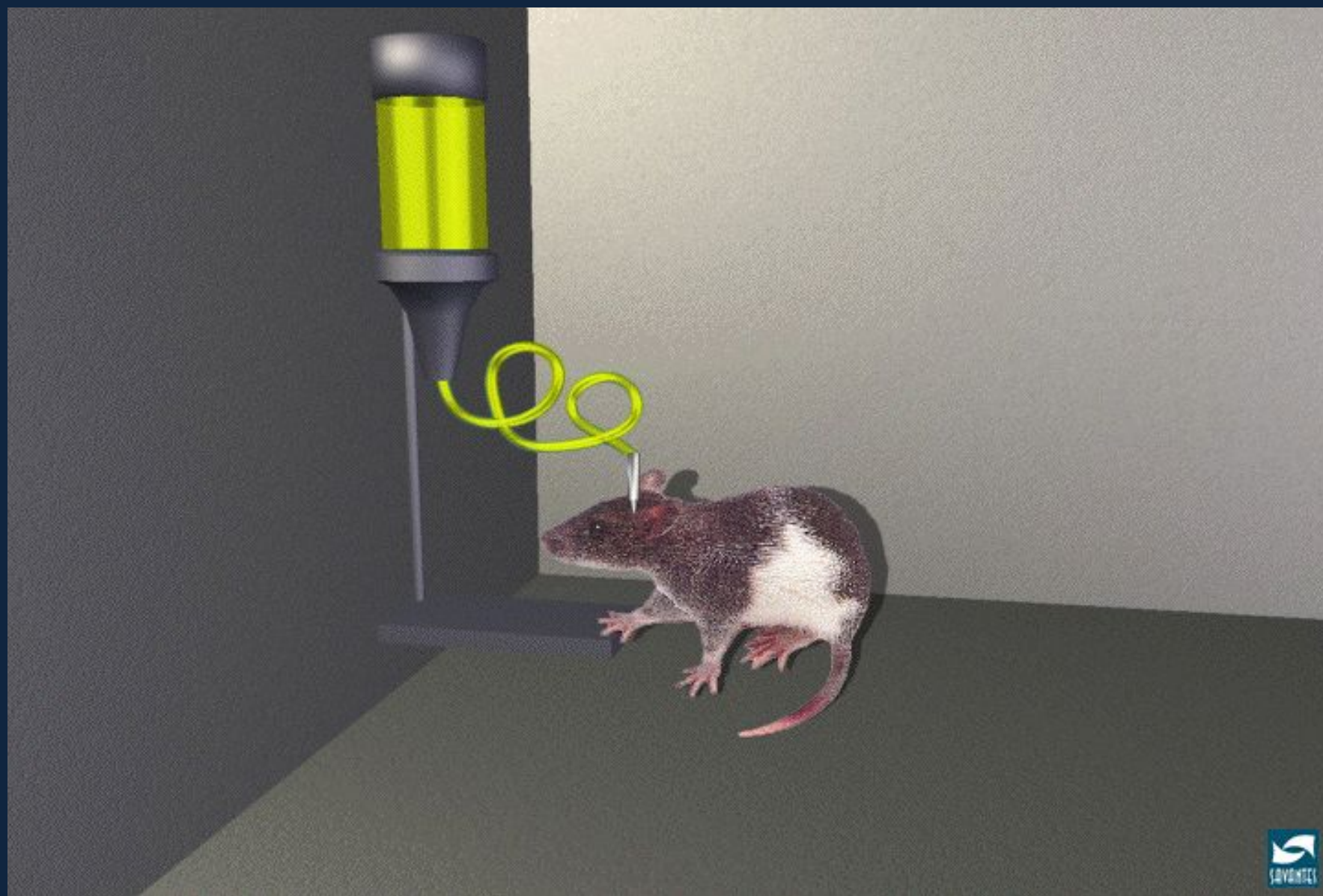
Laboratory animals

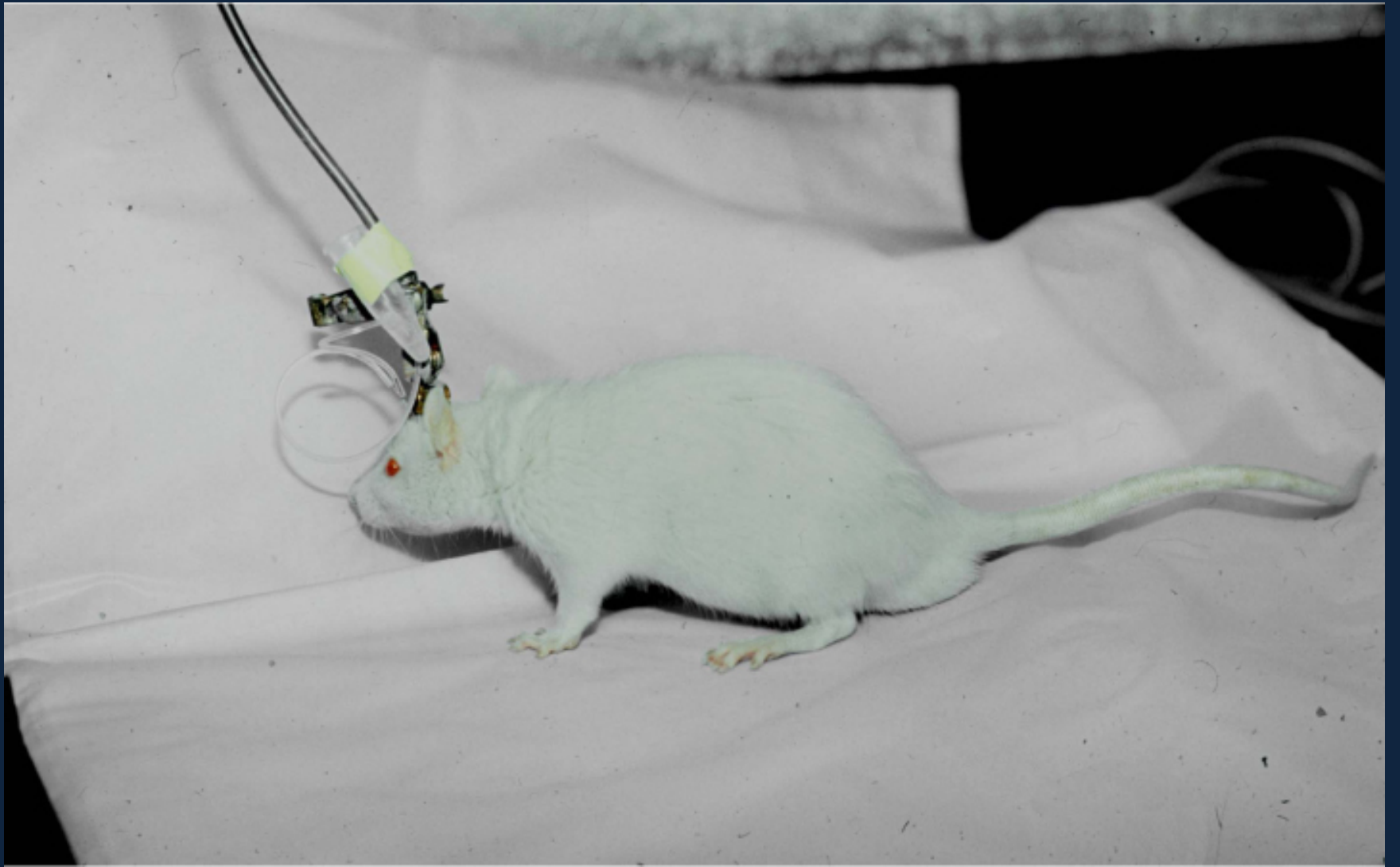








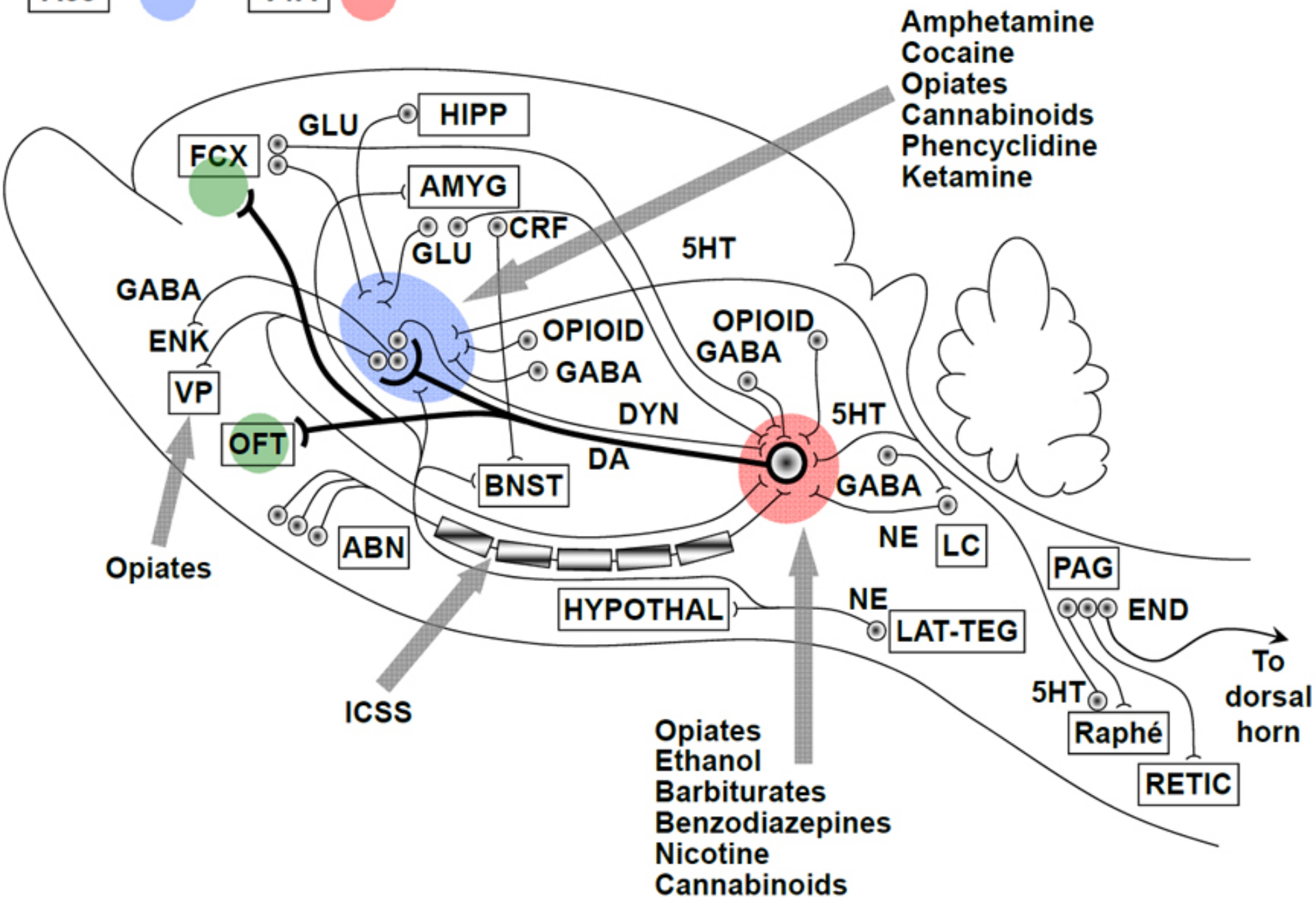


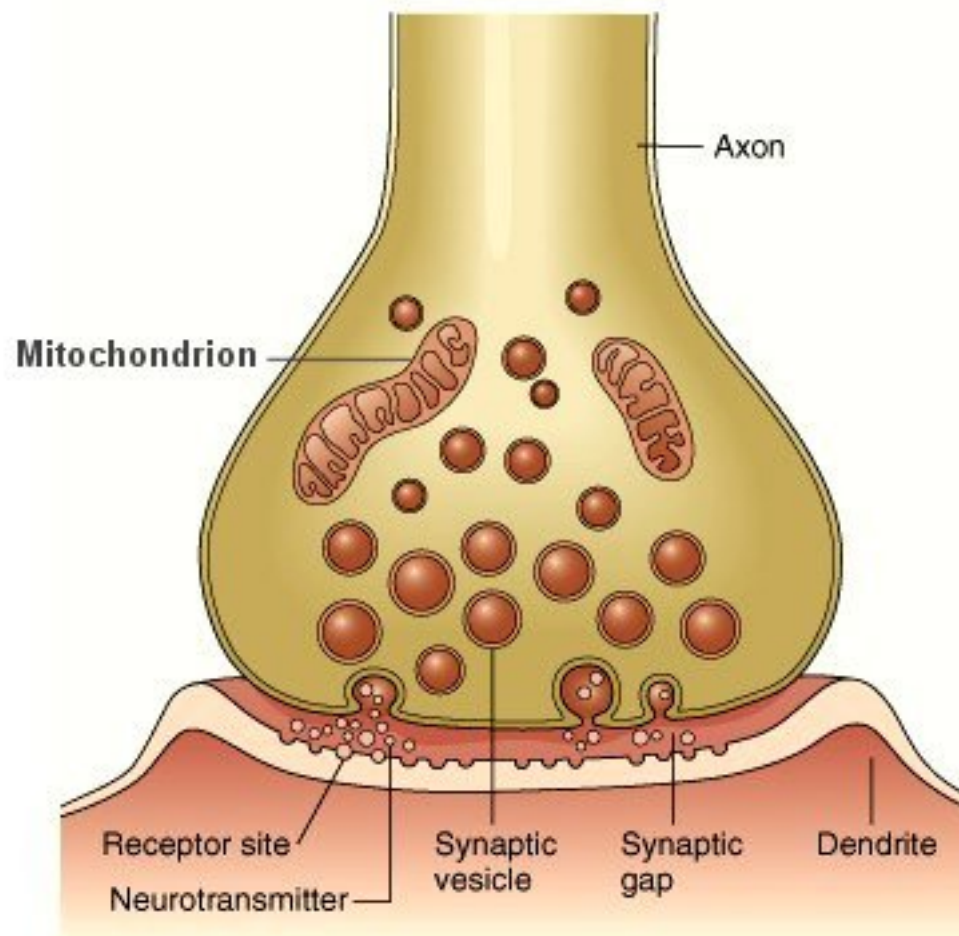


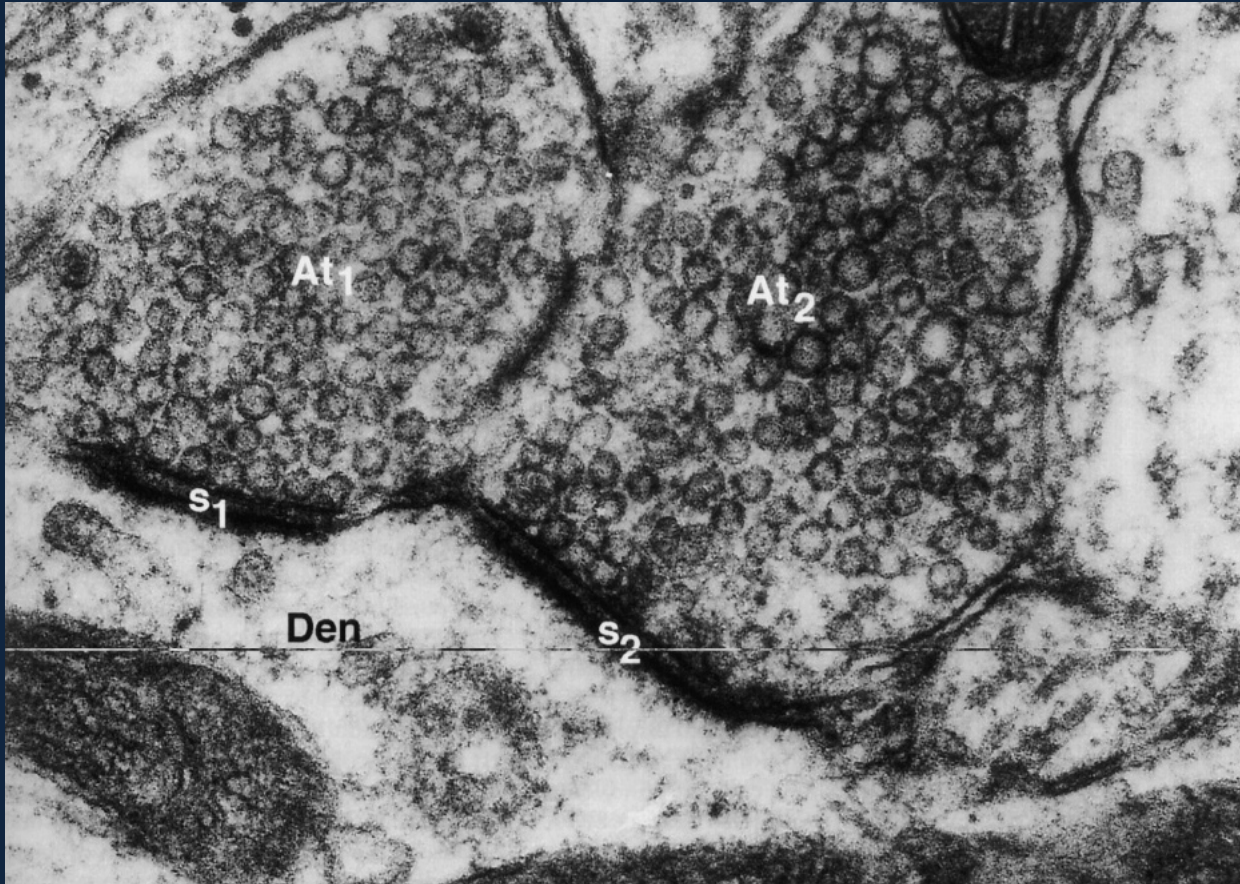
Acc



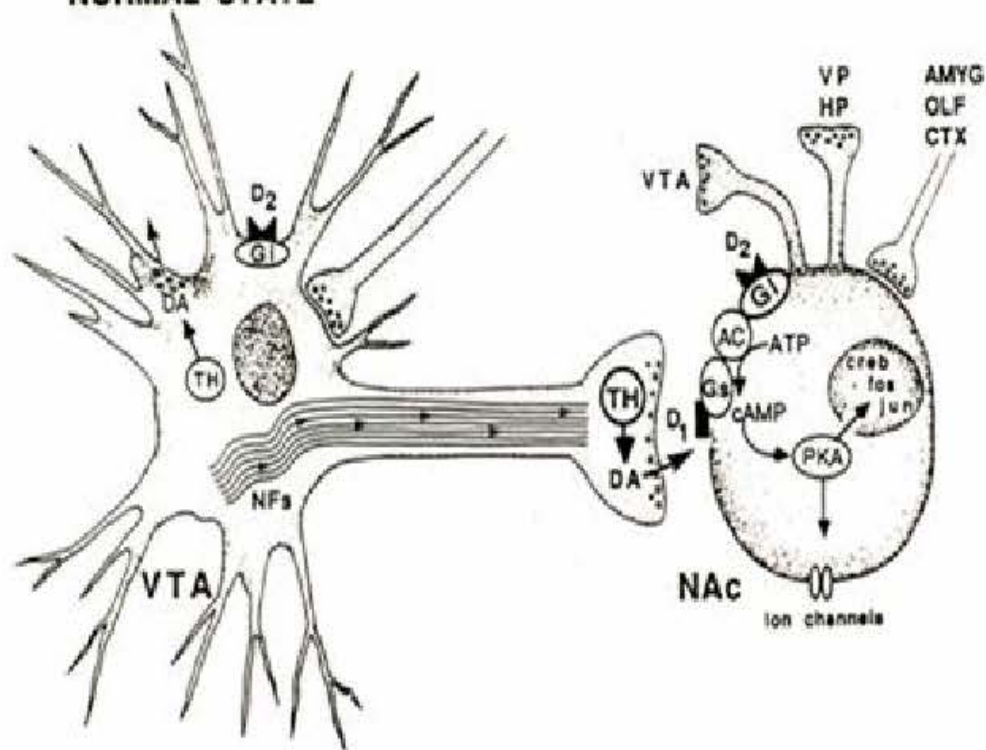
VTA



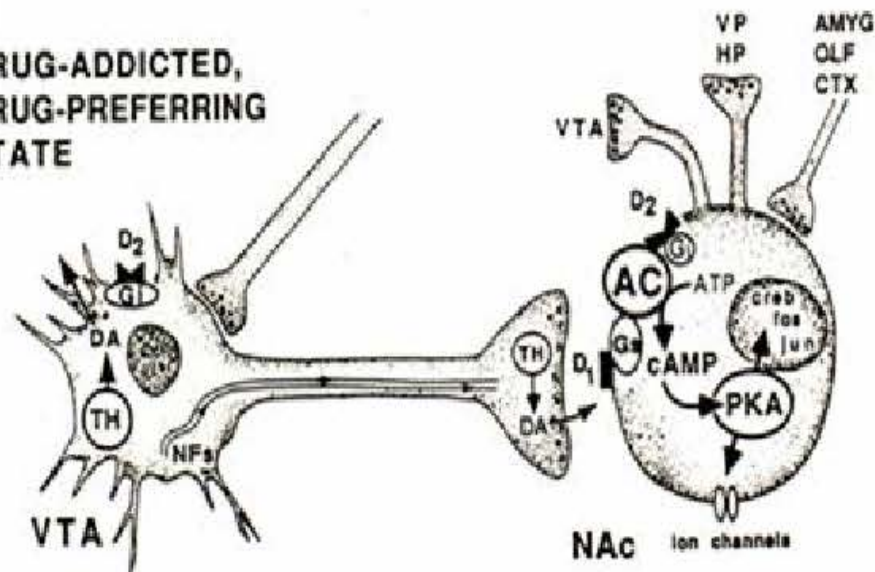




NORMAL STATE



DRUG-ADDICTED, DRUG-PREFERRING STATE





Treatment

“This patient has a rare form of medical insurance.”

Did Not Feel They
Needed Treatment



95.5%

Felt They Needed
Treatment and Did
Not Make an Effort



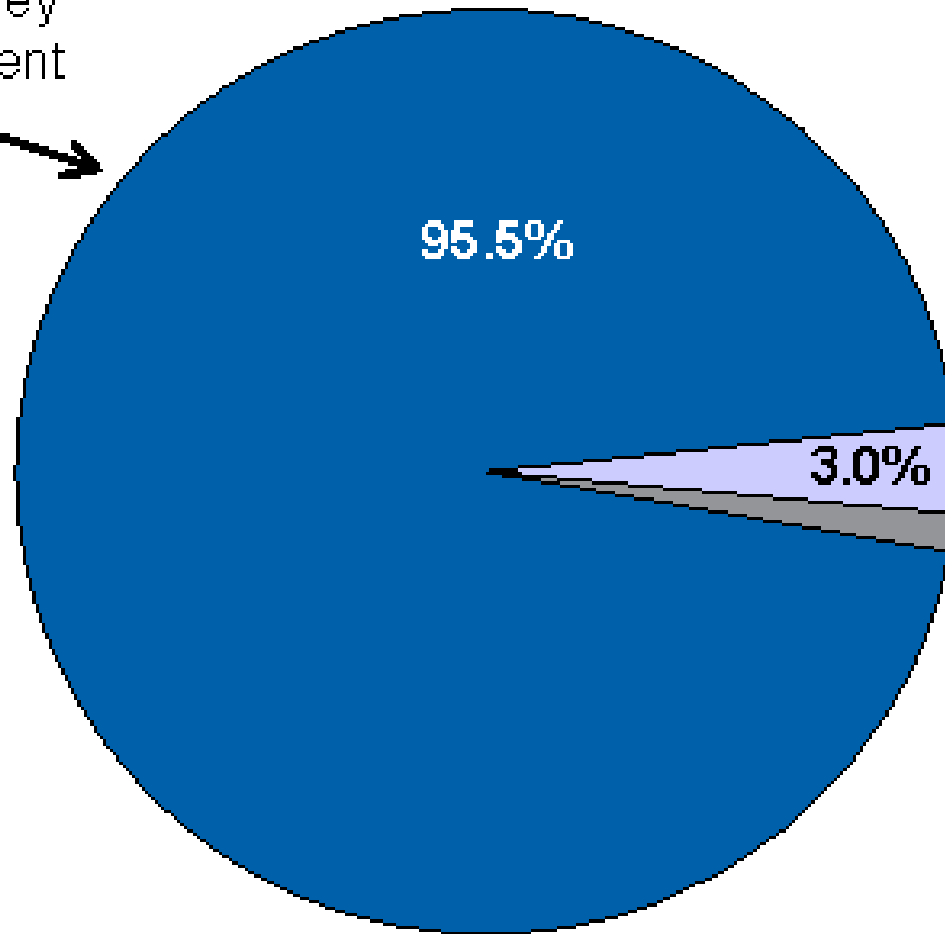
3.0%

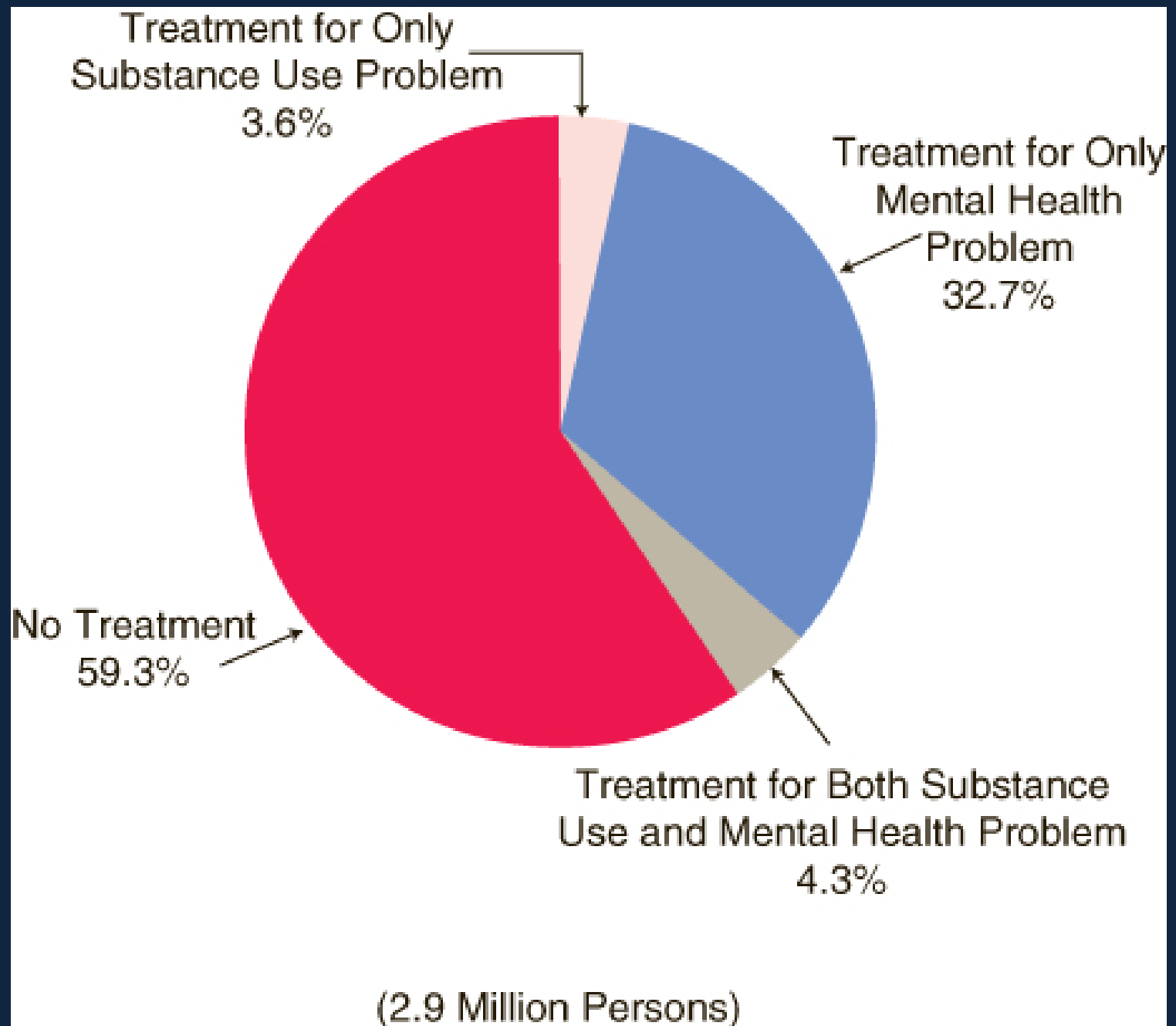
1.5%

Felt They Needed
Treatment and Did
Make an Effort



21.1 Million Needing But Not Receiving
Treatment for Illicit Drug or Alcohol Use





Treatment

- Social
- Psychological
- Biological



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Psychological Treatment

- CBT
- ACT (Hayes, Harris)
- Relapse Prevention (Marlatt, Gorski)
- Motivational Enhancement (Miller, Moyers, Rollnick)
- Contingency Management
- Dialectical Behavioral Therapy (Linehan)
- Individual Therapy
- Family Therapy
- Spirituality
- Self-help groups

Self-help groups

- Alcoholics Anonymous (AA)
- Narcotics Anonymous (NA)
- Rational Recovery
- Smart Recovery
- Medication Assisted Recovery Anonymous (MARA)

Treat medical complications

Treat psychiatric complications

The coexistence of a SUD and another psychiatric disorder (Dual Diagnosis) negatively affects the course, treatment and outcome of ***both*** conditions

Medications for OUD

Drug actions at the *mu* opioid receptor

1. agonist
2. partial agonist
3. antagonist

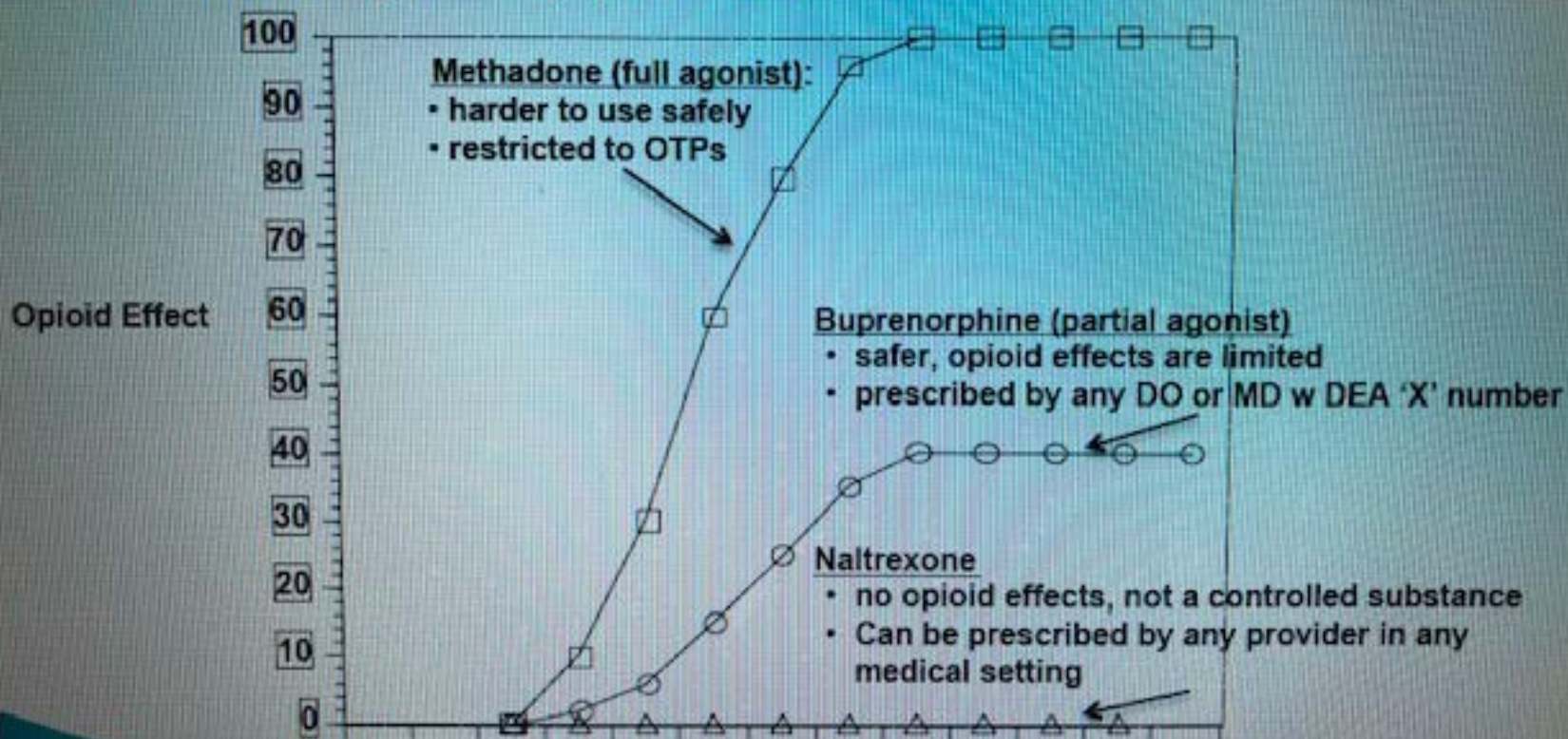
Drug actions at the *mu* opioid receptor

- agonist
heroin, oxycodone, hydrocodone, methadone, fentanyl, etc.
- partial agonist
buprenorphine
- antagonist
naloxone, naltrexone

Medications for OUD

- methadone (MMT)
- Medication Assisted Treatment (MAT)
 - buprenorphine
 - naltrexone

- The three medications have different opioid properties and differing safety profiles:



Suboxone

(buprenorphine and naloxone)



buprenorphine (*partial agonist*)

- Buprenex[®] (buprenorphine)
- Subutex[®] (buprenorphine)
- Suboxone[®] (buprenorphine + naloxone)
- Zubsolv[®] (buprenorphine + naloxone)
- Bunavail[®] (buprenorphine + naloxone)
- Butrans[®] / Belbuca[®] (buprenorphine)
- Probuphine[®] (bup 6-month implant)
- Sublocade[®] (bup 1-month SC injection)

naltrexone (*antagonist*)

(a) oral daily dose

(b) parenteral monthly IM injection

Opioid withdrawal: ancillary medications

- alpha-2 receptor agonist
 - clonidine
 - lofexidene
- muscle relaxants
- NSAIDs
- antiemetics
- antispasmodic agents
- anti-diarrheal agents
- anxiolytics

The End