



Scientific Framing:  
*Reciprocal Model of  
Pain and Substance Use*

Joseph W. Ditre  
Director, Center for Health Behavior Research & Innovation  
Professor, Department of Psychology



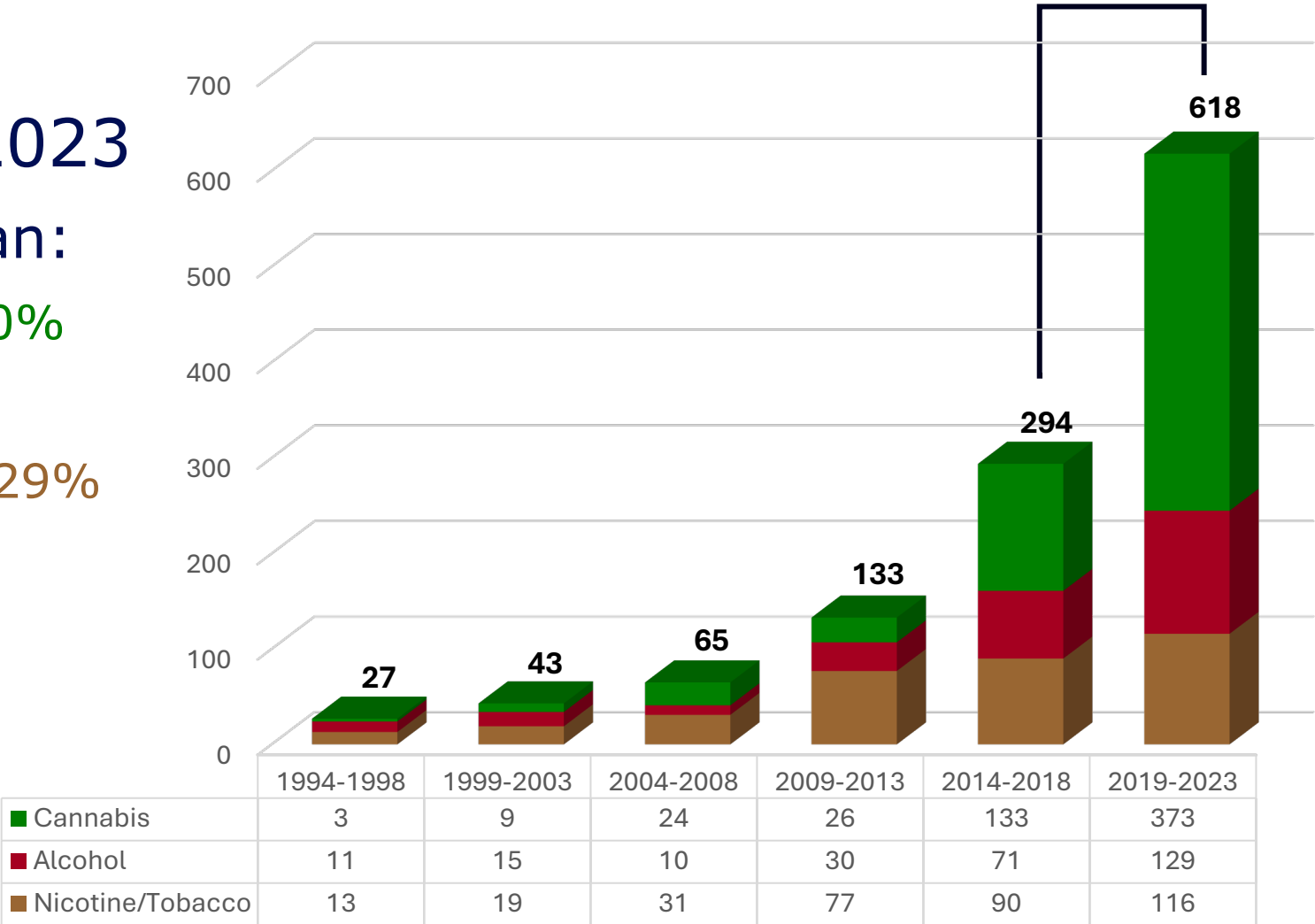
# Prescription Opioids and Beyond...

- Significant interest in relations between pain & other substance use
  - Nicotine/Tobacco
  - Alcohol
  - Cannabis
  - Benzodiazepines
  - Stimulant Medications



# Increasing Empirical Interest

- PubMed 1994-2023
  - Past 5-year span:
    - Cannabis +180%
    - Alcohol +82%
    - Nic/Tobacco +29%

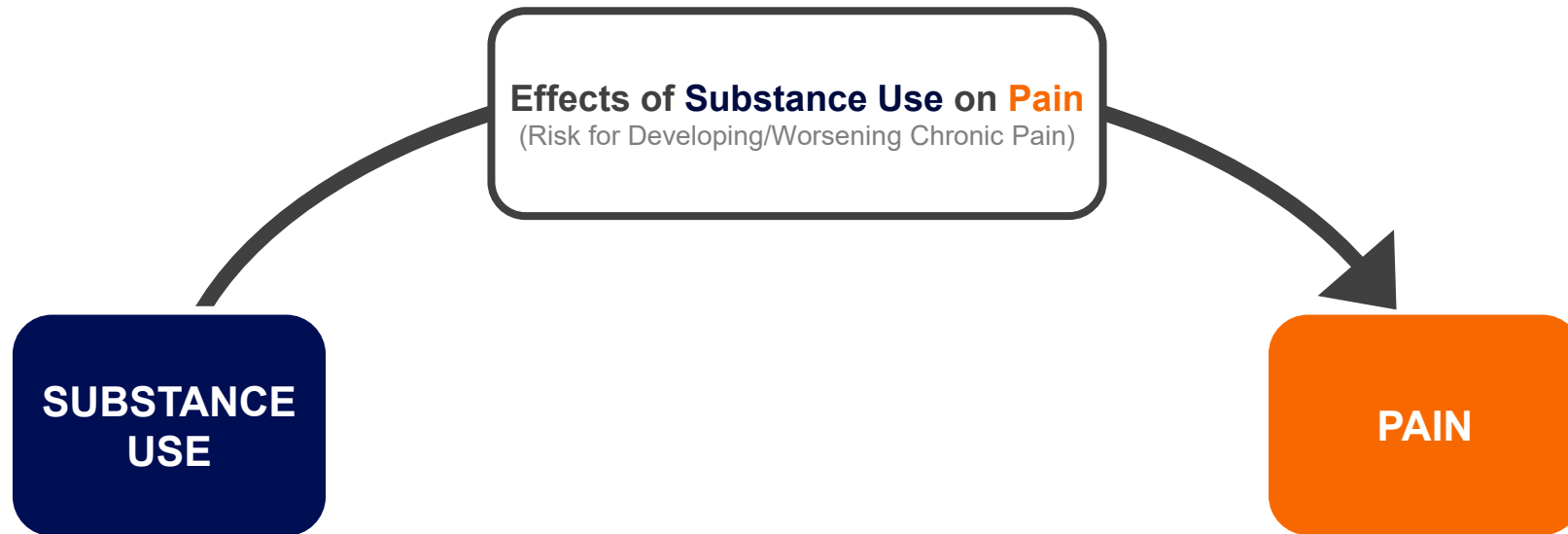


# Chronic Pain + SUD

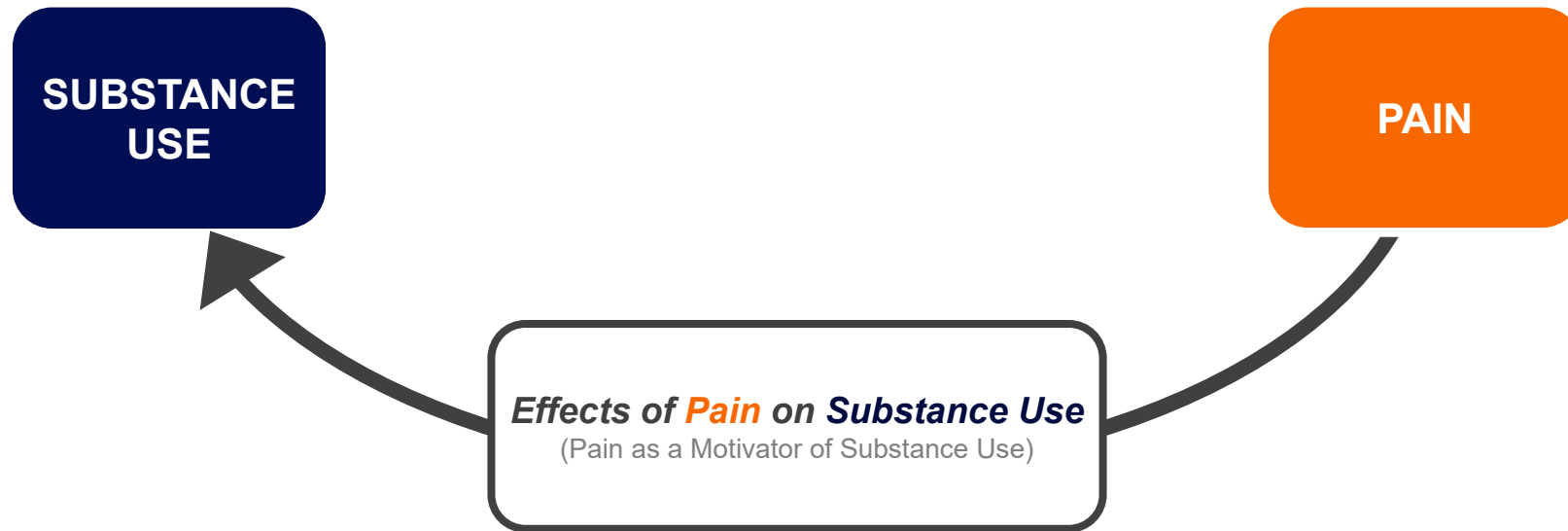
- Highly prevalent & commonly comorbid
  - Vary by pain/substance type & setting
  - Overlap with other mental/behavioral health challenges
- More severe pain & impairment
- Greater use/misuse of opioid medications
- \*Study/treatment typically siloed
  - Need for integrative conceptualization & treatment



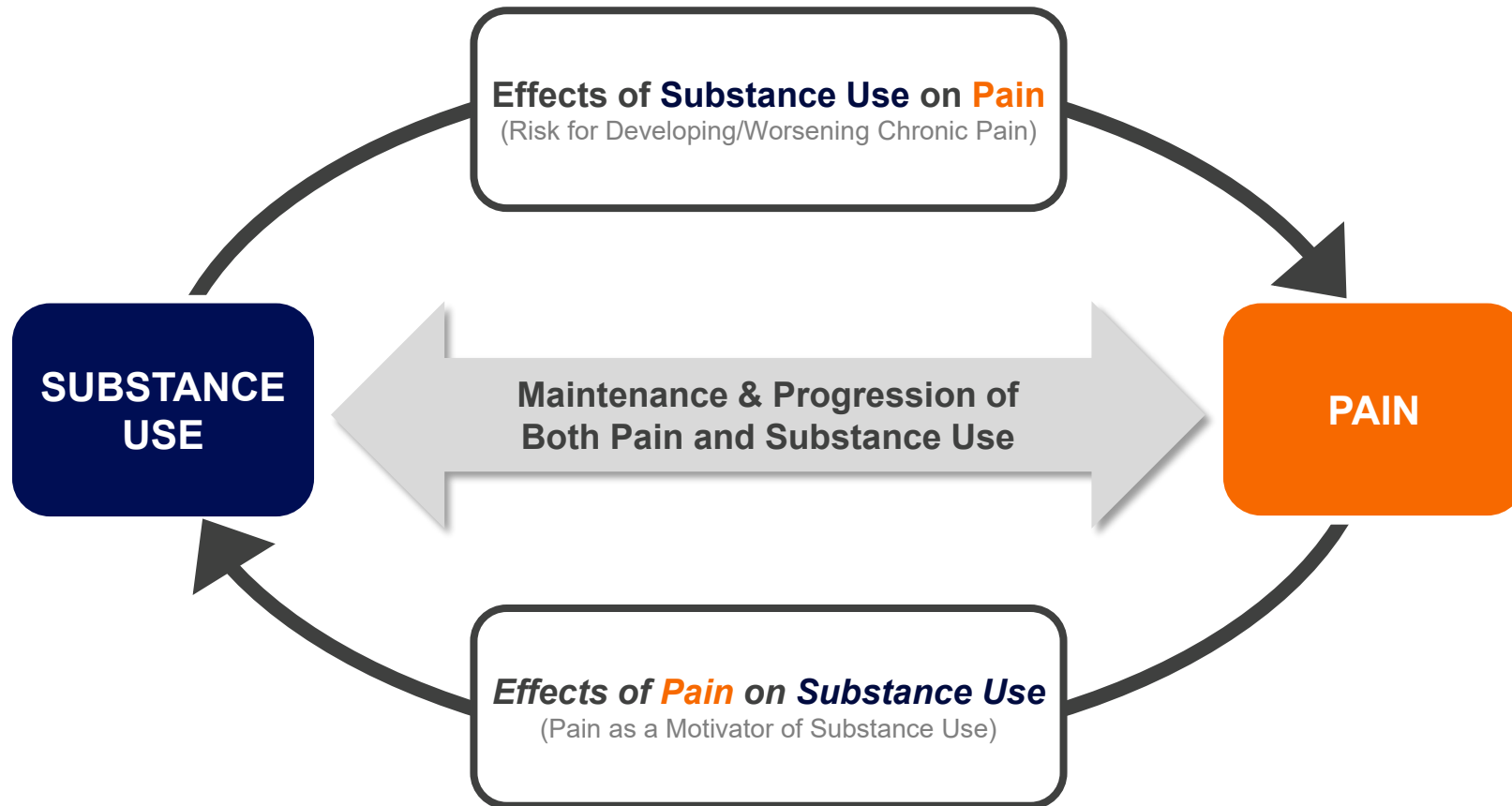
# Reciprocal Model of Pain and Substance Use



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# Intersection of Pain and Substance Use

- **Personalized Approaches**
  - (Phenotyping, Personalized Medicine, & Personalized Feedback)
- **Highly Impacted Populations**
  - (Social Determinants, Older Adults, Mental Health Comorbidity)
- **Interventions**
  - (Buprenorphine & Non-pharmacologic Approaches)
- **Beyond Opioids**
  - (Substance use that complicates pain)
  - (Pain management with non-opioid substances)





# Summary

- *The translational, transdisciplinary study of interrelations between pain and substance use represents a significant and still-emerging area of clinical and empirical interest*
- Scientific Presentations