

# Advocacy, equity, and evidence: Centering the needs of patients and learners

**Jeanette M. Tetrault, MD FACP FASAM**

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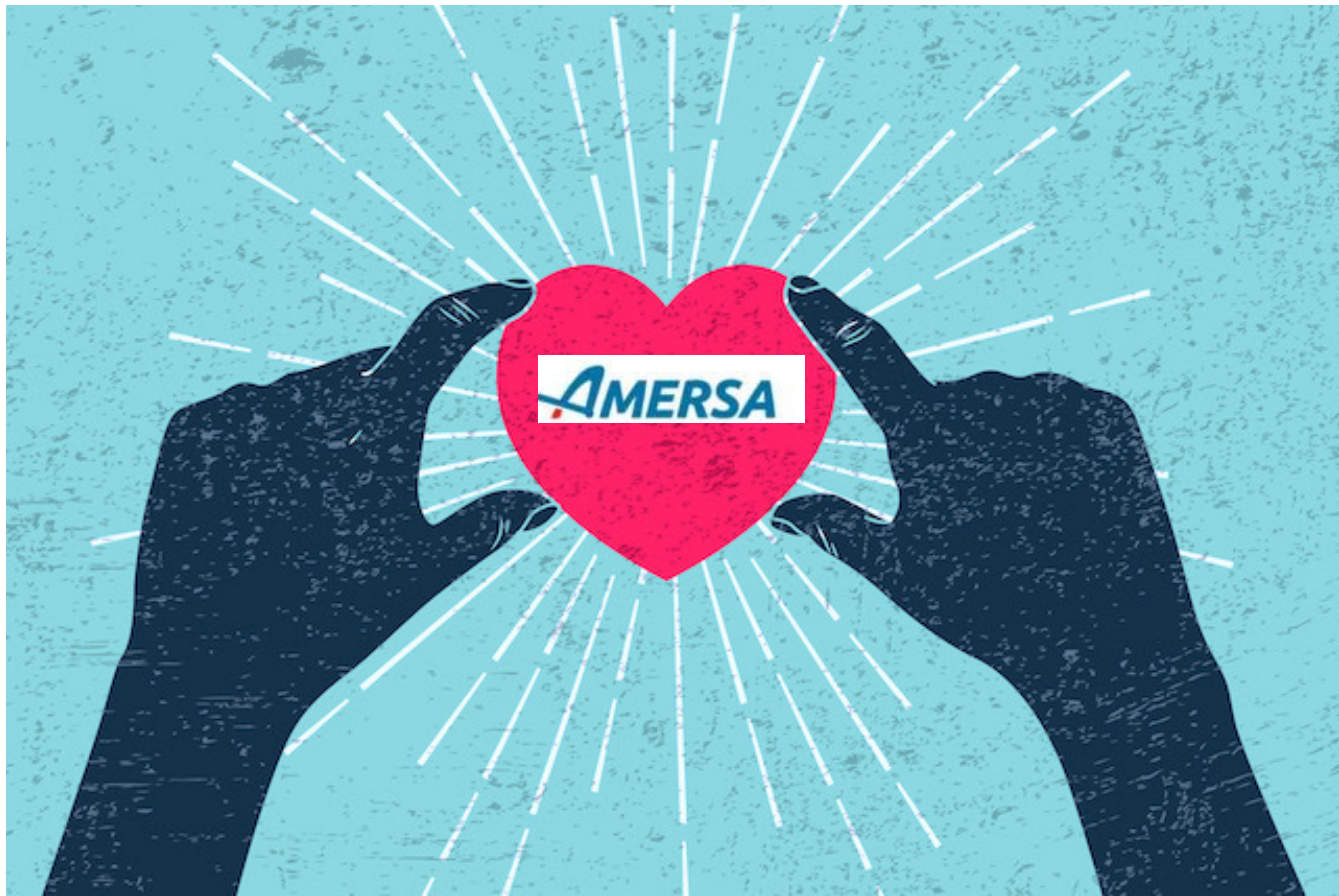
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*Yale Program in Addiction Medicine*





# Humble beginnings and privilege



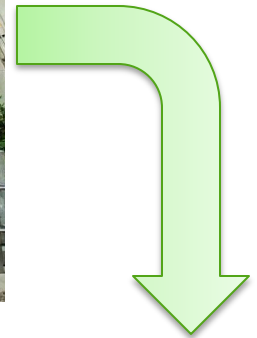
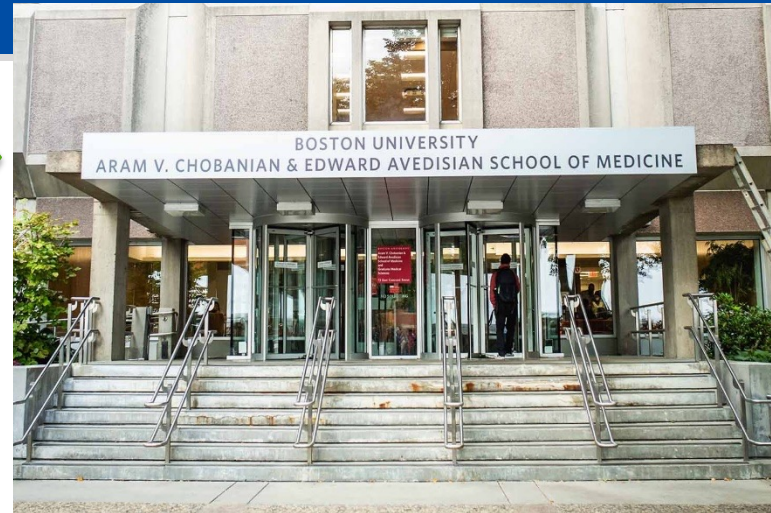
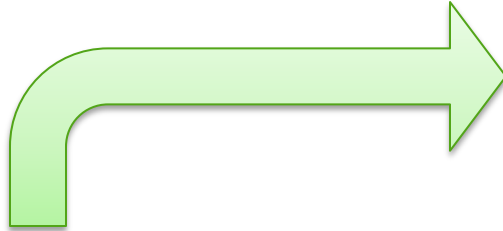


# A place to land





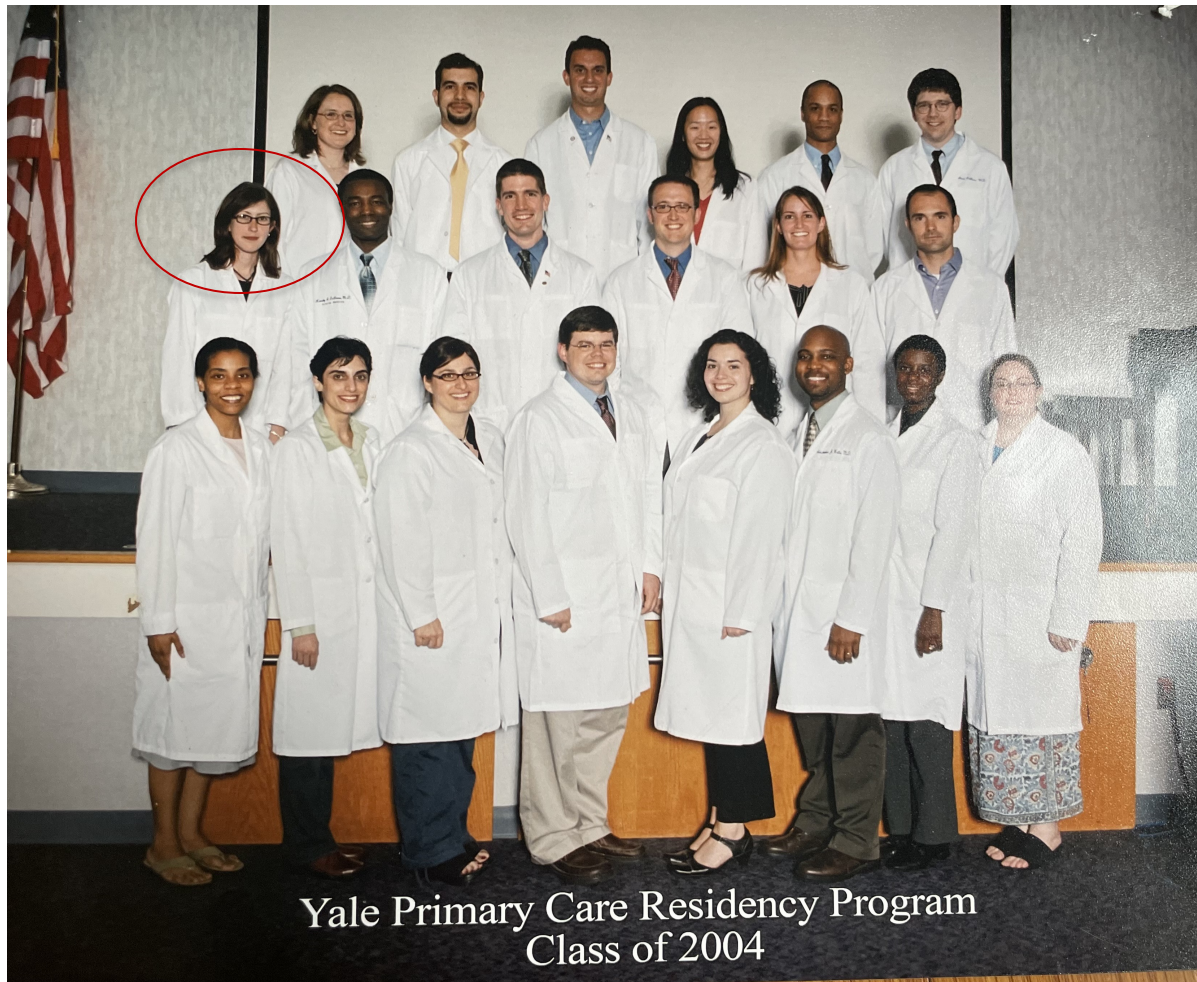
# Journey to medicine



# Andy







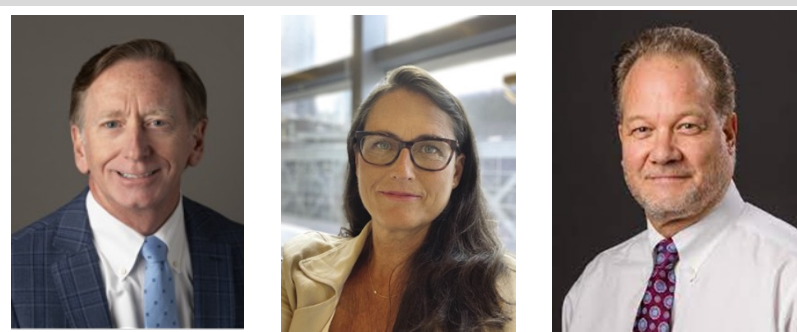
Yale Primary Care Residency Program  
Class of 2004



# Mentors, collaborators, and opportunities along the way



# Mentors, collaborators, and opportunities along the way



# Mentors, collaborators, and opportunities along the way





# Mentors, collaborators, and opportunities along the way



# Mentors, collaborators, and opportunities along the way



# APT Foundation





# Hepatic Safety and Antiretroviral Effectiveness in HIV-Infected Patients Receiving Naltrexone

Jeanette M. Tetrault, Janet P. Tate, Kathleen A. McGinnis, Joseph L. Goulet, Lynn E. Sullivan, Kendall Bryant, Amy C. Justice, and David A. Fiellin; For the Veterans Aging Cohort Study Team

**Table 2. Liver Enzyme Changes Pre-, During, and Post-Naltrexone Prescription**

	ALT (IU/l)			AST (IU/l)		
	<i>n</i>	Mean	<i>p</i>	<i>n</i>	Mean	<i>p</i>
(A) Pre-, during, and post-naltrexone prescription						
Pre-	113	41		112	41	
During	65	36	0.02	66	37	0.02
Post-	100	37	0.002	101	39	0.03

ACER, 2012, 36(2):318-24

# Hepatic Safety of Buprenorphine in HIV-Infected and Uninfected Patients With Opioid Use Disorder: The Role of HCV-Infection ☆,☆☆,★



Jeanette M. Tetrault, M.D. <sup>a,\*</sup>, Janet P. Tate, Ph.D. <sup>a,b</sup>, E. Jennifer Edelman <sup>a</sup>, Adam J. Gordon, M.D., M.P.H. <sup>c</sup>, Vincent Lo Re III, M.D. <sup>d</sup>, Joseph K. Lim, M.D. <sup>a</sup>, David Rimland, M.D. <sup>e,f</sup>, Joseph Goulet, Ph.D. <sup>b,g</sup>, Stephen Crystal, Ph.D. <sup>h</sup>, Julie R. Gaither, Ph.D., M.P.H., R.N. <sup>i</sup>, Cynthia L. Gibert, M.D. <sup>j,k</sup>, Maria C. Rodriguez-Barradas, M.D. <sup>l</sup>, Lynn E. Fiellin, M.D. <sup>a</sup>, Kendall Bryant, Ph.D. <sup>m</sup>, Amy C. Justice, M.D., Ph.D. <sup>a,b,i</sup>, David A. Fiellin, M.D. <sup>a,i</sup>

<b>Primary analysis, N=606</b>			
<b>Excluding pre-existing liver injury</b>			
<b>Liver enzymes</b>	<b>HIV-infected (N=175)</b>	<b>Uninfected (N=307)</b>	<b>p*</b>
<b>ALT</b>	0.7 (-7.6, 12.5)	1 (-6, 8.5)	0.75
<b>AST</b>	1 (-7.1, 11.2)	0.5 (-5, 8.1)	0.52
<b>Total bilirubin</b>	(N=202)	(N=310)	
<b>TB</b>	0 (-0.1, 0.2)	0 (-0.2, 0.1)	0.03

JSAT 2016, 68: 62-67

# Brief versus extended counseling along with buprenorphine/naloxone for HIV-infected opioid dependent patients<sup>☆</sup>

Jeanette M. Tetrault, MD <sup>a,\*</sup>, Brent A. Moore, PhD <sup>b,c</sup>, Declan T. Barry, PhD <sup>b</sup>, Patrick G. O'Connor, MD, MPH <sup>a</sup>, Richard Schottenfeld, MD <sup>b,c</sup>, David A. Fiellin, MD <sup>a,c</sup>, Lynn E. Fiellin, MD <sup>a,c</sup>

**Table 2**  
Main study outcomes.

Outcome	Total	PM (n=25)	PM+EMM (n=22)	p
Percent of opioid negative urines, mean (SD)	66.3 (31.6)	63.6 (33.8)	69.0 (30.6)	.54
Max duration of continuous opioid abstinence, weeks mean (SD)	5.0 (3.9)	4.9 (4.0)	5.2 (3.8)	.82
Percent of cocaine negative urines, mean (SD)	59.2 (42.0)	62.4 (40.7)	55.6 (44.1)	.59
Study completion, % (n)	70 (33)	80 (20)	59 (13)	.10
Percent of days of buprenorphine/naloxone adherence, mean (SD)	76.8 (27.7)	75.3 (19.8)	78.3 (20.6)	.70
Percent of days ARV adherence, mean (SD)	55.4 (33.0)	59.3 (27.4)	51.5 (27.5)	.56

JSAT, 43 (2012): 433-9



# The road less travelled





# Vietnam addiction medicine training



# Yale addiction curriculum threads




# Yale School of Medicine addiction curriculum thread

BRIEF REPORT



## Stitching a solution to the addiction epidemic: A longitudinal addiction curricular thread across four years of medical training

Srinivas B. Muvvala, MD MPH<sup>a</sup>, Michael L. Schwartz, PhD<sup>b</sup> , Ismene Petrakis, MD<sup>a</sup>, Patrick G. O'Connor, MD MPH<sup>c</sup>, and Jeanette M. Tetrault, MD<sup>c</sup>

<sup>a</sup>Psychiatry, Yale School of Medicine (YSM), New Haven, Connecticut, USA; <sup>b</sup>Neuroscience, Yale School of Medicine (YSM), New Haven, Connecticut, USA; <sup>c</sup>Medicine, Yale School of Medicine (YSM), New Haven, Connecticut, USA

### ABSTRACT

*Background:* Despite the enormous burden and public health impact, addiction continues to be one of the most under-treated chronic diseases primarily because of the lack of adequately trained work force of medical providers. To address this issue, medical schools should greatly expand education on addiction. *Methods:* The six-step Kern model of curriculum development was used as a framework to create an addiction curriculum which includes didactic activities, workshop exercises, practice-based learning activities, clinical simulations, and clinical experiences. *Results:* The authors and other members of the addiction thread committee conducted a comprehensive needs assessment, developed curriculum goals and objectives, and worked with course and clerkship directors to develop and enhance educational strategies and implement a longitudinal curricular thread woven across all four years of medical school curriculum. *Conclusion:* Development and implementation of a comprehensive addiction curriculum is feasible, and this model could lay the ground work for implementation at other institutions.

### KEYWORDS

Medical education;  
addiction; teaching;  
curriculum development

SAj 2020;41(4):475-479

# Substance Use Disorder Education in Medical Schools: A Scoping Review

Andrew Muzyk, PharmD, MHPE, Zachary P.W. Smothers MS, Dennis Akrohetu, Jennifer Ruiz Veve, Mark MacEachern, MLIS, Je

## Interprofessional Substance Use Disorder Education in Health Professions Education Programs: A Scoping Review

Andrew Muzyk, PharmD, MHPE, Zachary P.W. Smothers, MS, Kathryn M. Andolsek, MD, MPH, Melissa Bradner, MD, MSHA, Jeffrey P. Bratberg, PharmD, Seth A. Clark, MD, MPH, Kathryn Collins, Gerard A. Greskovic, BSPHarm, Larry Gruppen, PhD, Mark MacEachern, MLIS, Susan E. Ramsey, PhD, Jennifer Ruiz Veve, and Jeanette M. Tetrault, MD

### Abstract

#### Purpose

As medical schools adapt their curricula to prepare future physicians for the opioid crisis and for treating patients with substance use disorders (SUDs), educators should refer to courses described in the literature. This scoping review aimed to (1) provide a comprehensive evaluation and summation of peer-reviewed literature reporting on SUD education in medical schools globally and (2) appraise the research quality and educational outcomes reported in SUD education studies in medical schools.

#### Method

The authors searched 6 databases (3 Ovid MEDLINE databases, Embase, ERIC, and

### Abstract

#### Purpose

The authors conducted this scoping review to (1) provide a comprehensive evaluation and summation of published literature reporting on interprofessional substance use disorder (SUD) education for students in health professions education programs and (2) appraise the research quality and outcomes of interprofessional SUD education studies. Their goals were to inform health professions educators of interventions that may be useful to consider as they create their own interprofessional SUD courses and to identify areas of improvement for education and research.

#### Method

The authors searched 3 Ovid MEDLINE databases (MEDLINE, In-Process & Other Non-Indexed Citations, and Epub

Ahead of Print), Embase.com, ERIC via FirstSearch, and Clarivate Analytics Web of Science from inception through December 7, 2018. The authors used the Medical Education Research Study Quality Instrument (MERSQI) to assess included studies' quality.

#### Results

The authors screened 1,402 unique articles, and 14 met inclusion criteria. Publications dated from 2014 to 2018. Ten (71%) included students from at least 3 health professions education programs. The mean MERSQI score was 10.64 (SD = 1.73) (range, 7.5–15). Interventions varied by study, and topics included general substance use (n = 4, 29%), tobacco (n = 4, 29%), alcohol (n = 3, 21%), and opioids (n = 3, 21%). Two studies (14%) used a nonrandomized

2-group design. Four (29%) included patients in a clinical setting or panel discussion. Ten (72%) used an assessment tool with validity evidence. Studies reported interventions improved students' educational outcomes related to SUDs and/or interprofessionalism.

#### Conclusions

Interprofessional SUD educational interventions improved health professions students' knowledge, skills, and attitudes toward SUDs and interprofessional collaboration. Future SUD curriculum design should emphasize assessment and measure changes in students' behaviors and patient or health care outcomes. Interprofessional SUD education can be instrumental in preparing the future workforce to manage this pressing and complex public health threat.

Academic Medicine. 2020 Mar;95(3):470-480



# The Addiction Recovery Clinic: A Novel, Primary-Care-Based Approach to Teaching Addiction Medicine

Stephen R. Holt, MD, MS, Nora Segar, MD, Dana A. Cavallo, PhD, and Jeanette M. Tetrault, MD

## Abstract

### Problem

Substance use is highly prevalent in the United States, but little time in the curriculum is devoted to training internal medicine residents in addiction medicine.

### Approach

In 2014, the authors developed and launched the Addiction Recovery Clinic (ARC) to address this educational gap while also providing outpatient clinical services to patients with substance use disorders. The ARC is embedded within the residency primary care practice and is staffed by three to four internal medicine residents, two board-certified addiction medicine specialists, one chief

resident, and one psychologist. Residents spend one half-day per week for four consecutive weeks at the ARC seeing new and returning patients. Services provided include pharmacological and behavioral treatments for opioid, alcohol, and other substance use disorders, with direct referral to local addiction treatment facilities as needed. Visit numbers, a patient satisfaction survey, and an end-of-rotation resident evaluation were used to assess the ARC.

### Outcomes

From 2014 to 2015, 611 patient encounters occurred, representing 97 new patients. Sixty-one (63%) patients

were seen for opioid use disorder.

According to patient satisfaction surveys, 29 (of 31; 94%) patients reported that the ARC probably or definitely helped them to cope with their substance use. Twenty-eight residents completed the end-of-rotation evaluation; all rated the rotation highly.

### Next Steps

The ARC offers a unique primary-care-based approach to exposing internal medicine residents to the knowledge and skills necessary to diagnose, treat, and prevent unhealthy substance use. Future research will examine other clinical and educational outcomes.

Academic Medicine, 2017 92(5): 680-683

# Turning clinical questions into evidence....



Full length art

Interp  
bupre  
levels

Joseph H. D  
Nitin Sukum

Drug and Alcohol Dependence



Short communication

Addressi  
urine bu  
norbupro  
example

Stephen R. Holt<sup>a</sup>  
Jeanette M. Tetrau

Drug and Alcohol Dependence

Volume 186, 1 May 2018, Pages 171-174

JOURNAL OF

## Addiction Medicine

The Official Journal of the American Society of Addiction Medicine

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ORIGINAL RESEARCH

### Computerized Cognitive Behavioral Therapy for Substance Use Disorders in a Specialized Primary Care Practice: A Randomized Feasibility Trial to Address the RT Component of SBIRT

Tetrault, Jeanette M. MD; Holt, Stephen R. MD; Cavallo, Dana A. PhD; O'Connor, Patrick G. MD, MPH; Gordon, Melissa A. MFA; Corvino, Joanne K. MPH; Nich, Charla MS; Carroll, Kathleen M. PhD

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# Yale Addiction Medicine Fellowship









# Fruits of the shift

Journal of Substance Abuse Treatment 75 (2017) 49–53



Contents lists available at ScienceDirect  
Journal of Substance Abuse Treatment



## Onsite treatment of HCV infection with direct acting antivirals within an opioid treatment program



Jenna L. Butner<sup>a,b,\*</sup>, Neil Gupta<sup>a</sup>, Chris Fabian<sup>b</sup>, Susan Henry<sup>b</sup>, Julia M. Shi<sup>a,b</sup>, Jeanette M. Tetrault<sup>a,b</sup>

<sup>a</sup> Yale University School of Medicine, Department of Internal Medicine, United States

<sup>b</sup> APT Foundation, New Haven, CT, United States

### COMMENTARY

## SOAPs and SUDs: Patients With Substance Use Disorders and What Clinicians Should Know About the Cures Act

Carolyn A. Chan, MD, Jeanette M. Tetrault, MD, David A. Fiellin, MD, and Melissa B. Weimer, DO, MCR

### ORIGINAL RESEARCH

## Substance Use Disorders in Recently Hospitalized Patients With Cirrhosis

Lamia Y. Haque, MD, MPH, Simona Jakab, MD, Yanhong Deng, MPH, Maria M. Ciarleglio, PhD, and Jeanette M. Tetrault, MD

JAMA Network | **Open**



Original Investigation | Substance Use and Addiction

## Association Between Alcohol Use Disorder and Receipt of Direct-Acting Antiviral Hepatitis C Virus Treatment

Lamia Y. Haque, MD, MPH; David A. Fiellin, MD; Janet P. Tate, MPH, ScD; Denise Esserman, PhD; Debika Bhattacharya, MD, MSc; Adeel A. Butt, MBBS, MSc; Stephen Crystal, PhD; E. Jennifer Edelman, MD, MHS; Adam J. Gordon, MD, MPH; Joseph K. Lim, MD; Jeanette M. Tetrault, MD; Emily C. Williams, PhD, MPH; Kendall Bryant, PhD; Emily J. Cartwright, MD; Christopher T. Rentsch, PhD; Amy C. Justice, MD, PhD; Vincent Lo Re III, MD, MSCE; Kathleen A. McGinnis, DrPh, MS

### REVIEW

Editor's Choice

## Low Dose Initiation of Buprenorphine: A Narrative Review and Practical Approach

Shawn M. Cohen, MD, Melissa B. Weimer, DO, MCR, Ximena A. Levander, MD, Alyssa M. Peckham, PharmD, BCPP, Jeanette M. Tetrault, MD, and Kenneth L. Morford, MD

Drug and Alcohol Dependence 241 (2022) 109707



Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: [www.elsevier.com/locate/drugalcdp](http://www.elsevier.com/locate/drugalcdp)



## The impact of benzodiazepine exposure on treatment retention in an open-access methadone program: A retrospective cohort study

Kenneth L. Morford<sup>a,b,c,\*</sup>, Jeanette M. Tetrault<sup>a,b,c</sup>, Bin Zhou<sup>d</sup>, Fangyong Li<sup>d</sup>, Brynna Gleeson<sup>a,b,c,d,e,f,g</sup>, E. Jennifer Edelman<sup>a,b</sup>, Michael D. Stein<sup>a,b,c,d,e,f,g</sup>, Declan T. Barry<sup>a,c,g</sup>, Lynn Madden<sup>a,b,c</sup>

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# American College of Academic Addiction Medicine (ACAAM)





# Expanding training opportunities



# Expanding training opportunities







# REACH

Recognizing and Eliminating disparities in Addiction  
through Culturally informed Healthcare

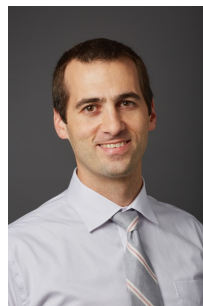
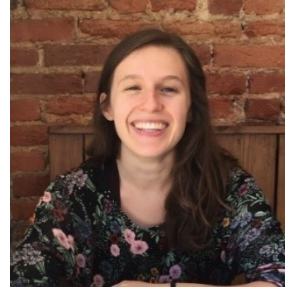




# Yale-University of Jordan Joint Training Program in Addiction Medicine



# Mentors, collaborators, and opportunities along the way





# Unconditional love





# Most important thing I have learned....



....Don't take yourself too seriously.

## AFTERGLOW

*I'd like the memory of me  
To be a happy one. I'd like  
To leave an Afterglow of  
Smiles when day is done.  
I'd like to leave an echo...  
Whispering softly down the  
Ways of happy times and  
Laughing times and bright  
And sunny days. I'd like  
The tears of those who  
Grieve to dry before the  
Sun of happy memories  
That I leave behind when  
Day is done.*



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- Kenny Morford, MD
- Melissa Weimer, DO
- Stephen Holt, MD
- Emma Biegacki, MPH
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- Entire APT Foundation Staff
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*Thank you!*

*Yale Program in Addiction Medicine*

