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If you are planning to attend, please review the articles attached below prior to the discussion:   * [**Emotionality**](http://r20.rs6.net/tn.jsp?f=001nr19-PTUOrGaXXdSnpcduIiQ0gDaZVWM9jaRAP5Cm76d-xdXwn6GDMa_Y95gU8z2_QWiKLod8m05-qkv6CiqF7neS9KlgSiuCsoBoDa6BsVkqJV1-Rtm6yjB2Bh4BNj8dRMZcgm0OaozcafFNScZM_9KrSfIo_C3GDanD6DEIyb65nBoTsw6EAxlebZRYOqtefipSkkdEr3y1InY7RfCNBGGP3qO6hX9e4OCxe-woso=&c=jBzG7FE1B9HNryuAHNN0oahmTpgpakpNMyopgU48AdAsFqdn70LMSw==&ch=vrefIWXWX26E6zvH3qSCQoNdZY4aniXxIVg7q_2NUdnA2D1RBvIzWQ==) * [**Feasibility Study**](http://r20.rs6.net/tn.jsp?f=001nr19-PTUOrGaXXdSnpcduIiQ0gDaZVWM9jaRAP5Cm76d-xdXwn6GDMa_Y95gU8z2S3SQlKtTv4kGrkUlmuN-PGbe4g3bAa-0NasRr3fqXwewqZquLkGwWtsRRA5t4Mj93IO_6V8Z5wRINVhObWeHCVghJclklNVH_X3kprnAvlY3g7WSm-dd-_kLCxw5NI-CyKLppZkofv1gX093yAAjjbNFOftz6JuqAgE7p98kC14=&c=jBzG7FE1B9HNryuAHNN0oahmTpgpakpNMyopgU48AdAsFqdn70LMSw==&ch=vrefIWXWX26E6zvH3qSCQoNdZY4aniXxIVg7q_2NUdnA2D1RBvIzWQ==) * [**Negative Symptoms**](http://r20.rs6.net/tn.jsp?f=001nr19-PTUOrGaXXdSnpcduIiQ0gDaZVWM9jaRAP5Cm76d-xdXwn6GDMa_Y95gU8z2vChAoia6QLnHCGD2eYgJeElaedd7T5Eg_PLdegQuELUCXJQ8oRrO5njU9ChmW0p1uuCblrBgDnMKk944usYcE8aBNloaGG8QrvOXxJOOkPv-clLUjEvSJv3XXYY7glTT5jt-0TwHZhBVoHAe07ByEdqgEmOAQKriKoXP7cZ39LY=&c=jBzG7FE1B9HNryuAHNN0oahmTpgpakpNMyopgU48AdAsFqdn70LMSw==&ch=vrefIWXWX26E6zvH3qSCQoNdZY4aniXxIVg7q_2NUdnA2D1RBvIzWQ==) * [**GABAergic**](http://r20.rs6.net/tn.jsp?f=001nr19-PTUOrGaXXdSnpcduIiQ0gDaZVWM9jaRAP5Cm76d-xdXwn6GDMa_Y95gU8z23NEuhualmqDuzlnez-W7o3BkIFMhUXWZD2xx52Rty2ZNb3vVqmbhkAkgA4J2Ch7yhkiSODseOXmRlc22cW6fsNSJc20AtBofxjsdmvABMRKIDjrMJK0EVKURJXk5hyEPmHnSLN4c7kfQ47KhETniKQi5aI_tXHOBO7QjkOBjNC8=&c=jBzG7FE1B9HNryuAHNN0oahmTpgpakpNMyopgU48AdAsFqdn70LMSw==&ch=vrefIWXWX26E6zvH3qSCQoNdZY4aniXxIVg7q_2NUdnA2D1RBvIzWQ==) * [**Concomitant Use**](http://r20.rs6.net/tn.jsp?f=001nr19-PTUOrGaXXdSnpcduIiQ0gDaZVWM9jaRAP5Cm76d-xdXwn6GDMa_Y95gU8z28tpC9SZavQ5tVygDpxuo82jYLzUHcGjWbsI2DqvsBFR5ak5KL960OBJXsZ7nzaN5cBdniu96ExUBxO5ddy3wdFoZOVlep8YzMFvIJ2J5IDoRbkUIzJbyWgn8E887_uwMxNHc3sFbxFHCczGYvgU379kvNAkBE3dfQEQ_b_k4xHE=&c=jBzG7FE1B9HNryuAHNN0oahmTpgpakpNMyopgU48AdAsFqdn70LMSw==&ch=vrefIWXWX26E6zvH3qSCQoNdZY4aniXxIVg7q_2NUdnA2D1RBvIzWQ==)   Click to: [**Join Microsoft Teams Meeting**](http://r20.rs6.net/tn.jsp?f=001nr19-PTUOrGaXXdSnpcduIiQ0gDaZVWM9jaRAP5Cm76d-xdXwn6GDMa_Y95gU8z2EyIeAY4Bp5ZX7z7i8g9Px2XKL4GhQeAr38rCFtCHtmup3ctUFiIL1goNTaxuMbgcv-jhzXxdg4Vynx-Q26fLdmdE4c7S4Ggd9THzFAVHrPtMlu66NMx4jk2Z5l5C68LJRuogNsvHv0TplW1WBHMNyiyDJZi5gZaJPshpYVfOprxVICTkJOycfNqFmL4YYH3tqwjjLzSkgRS1vbbQ5jILORBDek3DIAMuAdsP6gFPiPxzJsxJcKsuox3-A45ohX_Pl9Sz2QQrHA2BE6XOXE3wXKX46X1HRhOUUvBLUIm5xZNu0m8PftQytc32RE31la6wp_Y2rO6oP-9yEac6522m-fj-ldumPKhe8AIJ0JcjkO5TRPuxtRChZQtEV8EfHDw9PnDF2-qLg4Kp12KLcg6zSBVzfQNpUqhJ5pFJ-TDafhc=&c=jBzG7FE1B9HNryuAHNN0oahmTpgpakpNMyopgU48AdAsFqdn70LMSw==&ch=vrefIWXWX26E6zvH3qSCQoNdZY4aniXxIVg7q_2NUdnA2D1RBvIzWQ==)  Call in:  +1 920-455-5903  Conference ID: 902 420 358# | |  |  |  | | --- | --- | | |  | | --- | | **CAPT Ted Hall** | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  | | --- | --- | |  | https://ci6.googleusercontent.com/proxy/hGrq11JG9KecB2nG0ztsJdIJsShd70PcMwlY7vDILI7Fc7SBVfbbc4wG_OUVaE6DKHnxEZLrHYsrLGiKl23tFIyxiTHqbeDSTQkpSvG9=s0-d-e1-ft#https://imgssl.constantcontact.com/letters/images/sys/S.gif | | https://ci6.googleusercontent.com/proxy/hGrq11JG9KecB2nG0ztsJdIJsShd70PcMwlY7vDILI7Fc7SBVfbbc4wG_OUVaE6DKHnxEZLrHYsrLGiKl23tFIyxiTHqbeDSTQkpSvG9=s0-d-e1-ft#https://imgssl.constantcontact.com/letters/images/sys/S.gif | https://ci6.googleusercontent.com/proxy/hGrq11JG9KecB2nG0ztsJdIJsShd70PcMwlY7vDILI7Fc7SBVfbbc4wG_OUVaE6DKHnxEZLrHYsrLGiKl23tFIyxiTHqbeDSTQkpSvG9=s0-d-e1-ft#https://imgssl.constantcontact.com/letters/images/sys/S.gif |   CAPT Ted Hall is a board-certified psychiatric pharmacist practicing as a non-physician medical provider with diagnostic and prescriptive authority for psychiatric and substance use disorders. He is a member of the Substance Abuse and Mental Health Services Administration (SAMHSA) Technical Expert Panel (TEP) for Evidence-Based Guidebook on Treatment of Stimulant Use as well as the Indian Health Service (IHS) Heroin, Opioids, and Pain Efforts Committee. He also serves as a member of the Office of the White House/Office of National Drug Control Policy (ONDCP) Policy Control Committee- Eliminate Barriers to Treatment Availability. | | | | |

**Facilitator Notes:**

1. Trends and Contamination
   1. Today’s Methamphetamine v. “Speed” and Cocaine of the 80’s/90’s
   2. Drug supply contamination- Cocaine, Methamphetamine, and Stimulants Conference 2019
      1. Orman Hall, Ohio High Intensity Drug Trafficking Area (HIDTA)
         1. Meth/Ice seizures spiked starting in 2017
         2. 2018 seizures- 96% stimulants (26% meth/ice, 70% cocaine/crack, 3% opioids);
         3. Drug supply of stimulants contamination with fentanyl and/or heroin contributing to overdose deaths; 28% overdoses reported contamination with fentanyl and unintentional use (OH HIDTA, 2018)
      2. Stephen McConachie, US Customs and Border Protection; “What We’re Seeing on the Streets: The Latest Stimulant Variants Crossing the Border”, CMSC 2019
         1. What they capture at the border manifests on streets 6 months later
         2. Difficult to impact; Agents capture approx. 5-10% of drugs crossing the “border” (land, airports, seaports, Miami River, international mail, express consignment hubs such as UPS and DHL), so 90% still gets to the streets.
         3. Meth seizures quadrupled since 2014
         4. Mexican Drug Cartels have shifted production away from poppy fields/opioids to Meth “Super Labs”- cheaper and higher demand
            1. SUD individuals will consume what is available
            2. Towns that were primarily THC use have converted to Meth due to market change
2. Evidence-Based Non-Pharmacological/Behavioral Health Interventions
   1. SAMHSA TEP for Evidence-Based Guidebook on Treatment of Stimulant Use
      1. Motivational Interviewing, Contingency Management, Community Reinforcement Approach, Computer-Based Technologies for Cognitive Behavioral Therapy and Traditional CBT, Dialectical Behavioral Therapy, and Matrix Model
   2. Craig Rush, PhD; Professor at Univ. of Kentucky in Department of Behavioral Science, Psychiatry, and Psychology; over 25 years of Stimulant research
      1. “Targeting Impulse Control for Stimulant Disorders”
         1. Research: Stimulant/Meth use causes disruption in cognitive/behavioral “Go/No Go” system of the brain via neuromodulators of GABA, Glutamate, and DA
         2. Teaching Hypothetical Delay Discounting and Behavioral Inhibition
         3. Focus on impulse control via Inhibitory Control training
3. Non-FDA Approved Pharmacological Options\
   1. Craig Rush, PhD
      1. Inpatient Study: Topiramate 100mg plus Phentermine 30mg combination resulted in 68% abstinence rates
   2. Dr. William Morrone, DO, MPH
      1. “Neuropharmacology Needed to Mitigate Methamphetamine and Cocaine Addiction in the Absence of FDA Approved Treatments”
         1. Selegiline (increase DA and metabolism to methamphetamine and amphetamine- agonist replacement therapy) in combination with naltrexone compound (200mg/ml solution)
         2. Study findings: Phentermine was not as effective as Selegiline
         3. Assess for Dopanine Acute Withdrawal Syndrome (DAWS) during early stimulant abstinence
      2. Ted Hall
         1. Long acting naltrexone (Vivitrol) injection use in MUD patients in past; anecdotal observations of self reported less meth use days and reduction in amount of meth when using (similar to alcohol use disorder outcomes studies)
         2. Start using Vivitrol plus acamprosate to help restore GABA/Glutamate balance and mitigate impulsivity. Add Selegiline in clinically appropriate patents.
         3. Article: “Inhibitory Regulation of the Prefrontal Cortex Following Behavioral Sensitization to Amphetamine/Methamphetamine Psychostimulants: A Review of GABAergic Mechanisms”
            1. Behavioral sensitization refers to the unique phenomenon whereby repeat exposure to stimulants results in progressively increased behavioral and neurochemical response to stimulus following a period of abstinence (mediated through DA regulation in mesolimbic pathway, specifically in the ventral tegmental area).

Findings suggest a significant role of GABAergic neurons in the PFC following the sensitization of Meth as well as regional PFC GABA changes,

May explain how altered inhibitory control of efferent networks from PFC may maintain sensitized circuitry, sensitivity to drug-induced rewards, and persistent vulnerability to psychotic relapse in chronic psychosis

1. Infectious Disease/COVID-19 Considerations
   1. IV Use and Chem Sex
      1. Brad Lamm, ChemSex- meth-fused compulsive sex and roles of DA reward (Cocaine, Methamphetamine, and Stimulants Summit, 2019)
         1. ChemSex is treatment intolerant due to litany of available triggers
         2. Concomitant use with Viagra, GHB, and Amyl Nitrate (poppers)
         3. Miami demonstration at HYATT; using app Grinder to find offers of sex for meth exchange.
      2. IV meth use increases risk of HIV and Hepatitis C; increased popularity as primary route of administration as an artifact of the opioid epidemic
      3. Article: “Association Between Methamphetamine Use and Retention Among Patients with Opioid Use Disorders Treated with Buprenorphine”
         1. Increased risk of overdose death as consequence of persons who inject drugs (PWID) concomitant use of methamphetamine and opioids
            1. Study PWID in Seattle metro area demonstrated that increasing methamphetamine among non-MSM individuals between 2009 and 2017, with 53% reporting simultaneous injection of heroin and methamphetamines.
         2. Sexual risk taking and HIV among men who have sex with men (MSM)
   2. COVID-19
      1. Mobile population
      2. Unlikely to abide by ‘stay at home’ orders, social distancing or even be aware of them
      3. High risk for COVID-19 severe disease due to changes to interstitial lung tissue from chemical exposure of meth contaminants
      4. Psychosis and paranoia contribute to disregard and distrust of CDC recommendations (Gov’t conspiracies)