## Allopregnanolone has the potential to alleviate the effects of cocaine sensitization and withdrawal



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Can the dopaminergic effects of cocaine be modulated with allopregnanolone?

- My lab is seeking to answer this question because allopregnanolone could potentially be used as a prescription drug to treat cocaine use disorder in adults.
- If we can treat cocaine use disorder pharmacologically/neurochemically, we might have better success at preventing addicts from relapsing

## What were our results?

- We successfully replicated a model of cocaine addiction in rats that will be used as a *baseline* for testing the viability of allopregnanolone to reverse the sensitization and withdrawal effects of cocaine
- These results are important because they set the stage to evaluate allopregnanolone's ability to treat cocaine sensitization in a rat model
- If we can effectively treat cocaine sensitization with allopregnanolone in a rat model, this same treatment might be used to treat addiction in human subjects