

Advanced undergraduate seminar

7.341 Your Brain on Bugs:

The Gut-Microbiota-Brain Axis
and Its Impact on Addiction

Spring 2024

Tuesdays
10am - 12pm

Class day/time
can be adjusted
to accomodate
student schdules



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Lab of Tami Lieberman

Lab of Olivia Corradin

Some big questions we will address:

01

How does your brain connect
stressful and rewarding stimuli?
How can this lead to addiction?

02

How can opioids alter the
cellular signaling pathways
of your brain?

03

How can bacteria living in your
intestines change how your
brain responds to stress?

04

Which bidirectional pathways
connect the gut to the
microbiota to the brain?

05

Can we design probiotics
to help treat substance
use disorders?