

Congress of the United States
Washington, DC 20515

November 3, 2015

Dr. Francis Collins
Director
National Institutes of Health
One Center Drive
Bethesda, MD 20892

Dear Director Collins:

We are writing to bring your attention to recent scientific developments that, although preliminary, could lead to homemade illegal narcotics. We believe this issue deserves your attention and we request that the National Institutes of Health (NIH) keep Congress informed about what is being done to prevent abuse of this new technology.

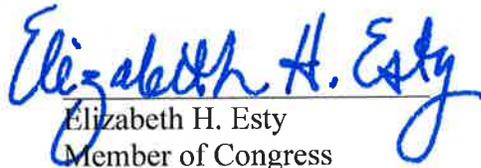
As you may know, according to a paper published in *Nature Chemical Biology* in May 2015, researchers have figured out almost all the steps necessary to produce morphine from sugar using genetically engineered yeast. Now we have learned from a study published in *Science* on June 25, 2015 that another group of researchers has discovered the last steps necessary to use this yeast to produce narcotics. While this scientific discovery has many exciting medical implications, it could also lead to the production of narcotics for illicit uses.

We applaud these researchers for their thoughtful and cautious approach to developing this new yeast strain and we hope that this groundbreaking will lead to more powerful and less addictive painkillers, but we must not be caught unprepared for the possibility of a new homemade source of opiates. We urge the NIH and its partners to examine this technology and begin forming a strategy for how to prevent abuse while protecting the culture of scientific innovation that is so crucial to cultivating medical and scientific advances.

Sincerely,



Bill Foster
Member of Congress



Elizabeth H. Esty
Member of Congress



Tim Ryan
Member of Congress



Katherine Clark
Member of Congress



Marcy Kaptur
Member of Congress



Donna F. Edwards
Member of Congress



Derek Kilmer
Member of Congress



Juan Vargas
Member of Congress



Janice Hahn
Member of Congress



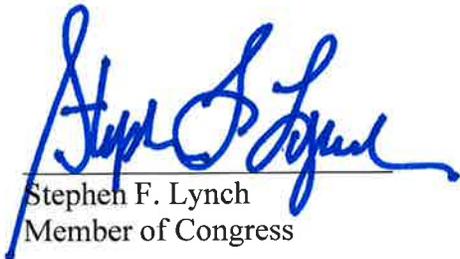
Alex X. Mooney
Member of Congress



Chris Van Hollen
Member of Congress



Dan Lipinski
Member of Congress



Stephen F. Lynch
Member of Congress