## **C**-EPIBIOME

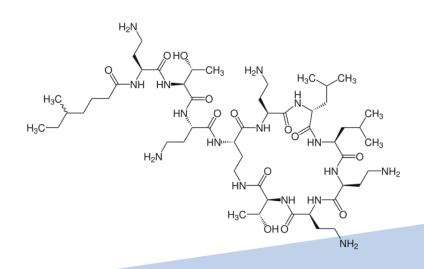
PRECISION MICROBIOME ENGINEERING

## **Curing the Modern Dairy with Precision Microbiome Engineering**

BIO 2016 Global Workshop for Novel Anti-Infectives | June 6, 2016 Nick Conley, PhD, *Cofounder & CEO*, EpiBiome

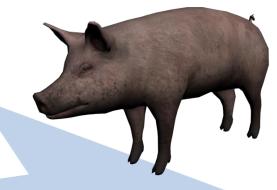
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## From Farm to Fork: MCR-1 Confers Plasmid-Based Colistin Resistance



## 1959

Colistin introduced, but exhibits kidney toxicity **2000s** With carbapenem resistance, colistin becomes the lastline therapy



# 2015

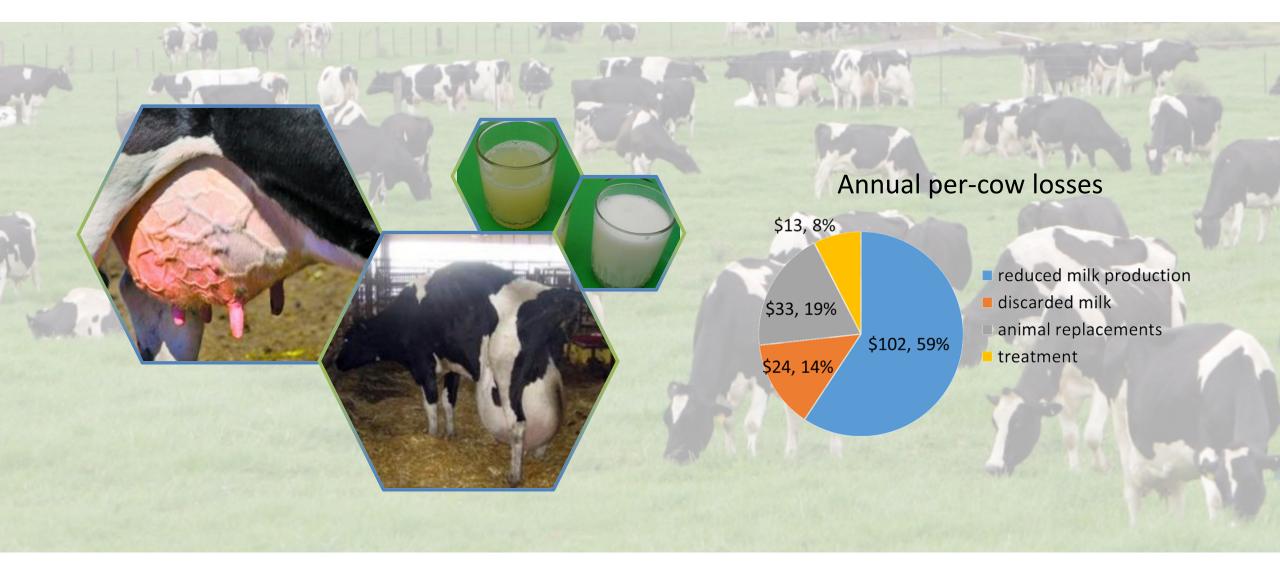
Colistin (Polymyxin) resistance observed

Liu, Y.-Y. et al. Lancet Infect. Dis. http://dx.doi.org/10.1016/S1473-3099(15)00424-7 (2015).





### There are 270 Million Dairy Cows on the Planet





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