

Propositions

1. Often the DNA repair pathways from *E. coli* are seen as the predecessor of their human counterparts. For mismatch repair, the opposite can be claimed. (*This thesis*)
2. In mismatch repair, finding the needle in the haystack is not the rate-limiting step. (*This thesis*)
3. A large difference between MMR in humans and *E. coli* is the size of the repair patch. (*This thesis*)
4. The sequence of the bacterial chromosome is determined by function and local mutational bias. (*This thesis*)
5. A model is best used to help ask the right questions, not for providing answers. (*This thesis*)
6. “The highest activity a human being can attain is learning for understanding, because to understand is to be free.” (*Baruch Spinoza*)
7. “There is a paradox in the growth of scientific knowledge. As information accumulates in ever more intimidating quantities, disconnected facts and impenetrable mysteries give way to rational explanations, and simplicity emerges from chaos.” ([The Molecular Biology of the Cell](#))
8. “Let us try to teach generosity and altruism, because we are all born selfish.” (*Richard Dawkins, The Selfish Gene*)
9. Efficient MMR is arguably more important in men than in women. (*Maduro MR et al, Mol Hum Reprod. 2003; Mukherjee S et al, Curr Opin Urol. 2010*)
10. “To best foster scientific progress, the underlying data should be made freely available for researchers to use, wherever this is legal and ethical.” (PLOS Data policy, <http://www.plos.org/>)
11. The early bird may get the worm, but it’s the second mouse that gets the cheese.