# Article information:

Negatively charged, intrinsically disordered regions can accelerate target search by DNA-binding proteins - PubMed
<https://pubmed.ncbi.nlm.nih.gov/36774964/>

# Article summary:

1. Intrinsically disordered regions (IDRs) with large negative charge, referred to as D/E repeats, are found in many DNA/RNA-binding proteins.

2. Experiments and simulations show that D/E repeats can accelerate the target association process in the presence of non-functional high-affinity ligands ('decoys').

3. This study illuminates an unprecedented role of the negatively charged IDRs in the target search process.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is a reliable source of information on the role of negatively charged intrinsically disordered regions (IDRs) in accelerating target search by DNA-binding proteins. The authors provide evidence from experiments and simulations to support their claims, and they present a detailed kinetic model to explain how D/E repeats can accelerate the target association process in the presence of decoys. The article does not appear to be biased or one-sided, as it presents both sides of the argument equally and provides evidence for each claim made. Furthermore, there is no promotional content or partiality present in the article. The authors also note possible risks associated with their findings, such as potential misregulation due to autoinhibition caused by D/E repeats. All in all, this article is a trustworthy and reliable source of information on this topic.

# Topics for further research:

* DNA-binding protein target search
* Intrinsically disordered regions (IDRs)
* Decoy effect on target search
* Kinetic model of target association
* Autoinhibition caused by D/E repeats
* Role of negatively charged IDRs in target search

# Report location:

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