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| Book Name: | **Repetitive DNA and Its Roles in Diverse Facets of Biology** |
| Manuscript Number: | **Ms\_BPR\_5976** |
| Title of the Manuscript:  | **Repetitive DNA and Its Roles in Diverse Facets of Biology** |
| Type of the Article | **Complete Book** |

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| PART 1: Comments |
|  | Reviewer’s comment**Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | Repetitive DNA, the sequences of nucleotides repeated within a genome, is playing the significant roles in the diverse biological process. Repetitive DNA are contributing to the overall structure and organization of the chromosomes, including the formation of the heterochromatin |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Suggested title of the book** **Repetitive DNA and Its Roles in Diverse Areas of Genetics**  |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | The Abstract of the title is comprehensive and excellent. Repetitive DNA, the sequences of nucleotides repeated within the genome, are playing the significant roles in diverse biological process. These repeats, are mainly found in the different locations and they are mainly forming the different structures,which is crucial/ essential for the organization of the genome,regulation of the genes and various disease development. In addition, repetitive DNA, once it called and considered as the "junk DNA," it is now recognized as the dynamic component of the genome  |  |
| **Is the manuscript scientifically, correct? Please write here.**  | **Yes the manuscript is scientifically correct**  |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | **Some extra citations are there** 1. Shah, N. M. et al. Pan-cancer analysis identifies tumor-specific antigens derived from transposable elements. *Nat. Genet.* **55**, 631–639 (2023). This article reported that cryptic promoters within transposable elements (TEs) can be transcriptionally reactivated in tumors to create new TE-chimeric transcripts, which can produce immunogenic antigens.
2. Bernabe, I. B. et al. Genome-wide contribution of common short-tandem repeats to Parkinson’s disease genetic risk. *Brain* **146**, 65–74 (2023).
3. Bourque, G. et al. Ten things you should know about transposable elements. *Genome Biol.* **19**, 199 (2018).
4. Zhang, X. & Meyerson, M. Illuminating the noncoding genome in cancer. *Nat. Cancer* **1**, 864–872 (2020).
5. Al-Turki, T. M. & Griffith, J. D. Mammalian telomeric RNA (TERRA) can be translated to produce valine-arginine and glycine-leucine dipeptide repeat proteins. *Proc. Natl Acad. Sci. USA.* **120**, e2221529120 (2023).
6. Touati, R. et al. New methodology for repetitive sequences identification in human X and Y chromosomes. *Biomed. Signal Proc. Control* **64**, 102207 (2021).
7. Liehr, T. Repetitive elements in humans. *Int. J. Mol. Sci.* **22**, 2072 (2021).
8. Han, G. et al. Diversity of short interspersed nuclear elements (SINEs) in lepidopteran insects and evidence of horizontal SINE transfer between baculovirus and lepidopteran hosts. *BMC Genom.* **22**, 226 (2021).
9. Wang, Y., Gallagher-Jones, M., Suśac, L., Song, H. & Feigon, J. A structurally conserved human and Tetrahymena telomerase catalytic core. *Proc. Natl Acad. Sci. USA.* **117**, 31078–31087 (2020).
10. Malik, I., Kelley, C. P., Wang, E. T. & Todd, P. K. Molecular mechanisms underlying nucleotide repeat expansion disorders. *Nat. Rev. Mol. Cell Biol.* **22**, 589–607 (2021).
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| Is the language/English quality of the article suitable for scholarly communications? | The Quality of English writing is suitable for the scholar communications  |  |
| . Optional/General comments |  |  |

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| **PART 2:**  |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?**  | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

**Reviewer details:**

**Saptarshi Mukherjee , India**