



[conjecture]

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Genes are quantum computers

Open Quantum Collaboration^{*†}

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Abstract

A sequence of logical arguments is presented in order to conclude that if biological cells are governed by quantum computational algorithms, then it is indeed possible to (re)program the genes' states in a quantum computer.

keywords: quantum biology, quantum computation, quantum biological computer

The most updated version of this paper is available at

<https://osf.io/a7tbu/download>

Introduction

1. Quantum biology means that quantum theory can be applied to genes [1–3].
2. Quantum computation is perhaps the most fundamental set of rules/operations of nature [4, 5].

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Logic applied to quantum biology

3. Humans are made by genes.
4. The genes are quantum biological entities.
5. Quantum mechanics operates in our genes.
6. Then we conclude that our genes are governed by quantum computational algorithms.
7. Therefore, genes can be simulated/deployed into a quantum computer.

Final Remarks

8. If our **genes** are ruled by quantum algorithms, then they can be fully (re)programmed as a **quantum biological computer**.
9. Gene reprogramming can be used to cure diseases [6].

Open Invitation

Review, add content, and **co-author** this paper [7, 8].

Join the **Open Quantum Collaboration** (<https://bit.ly/ojmp-slack>).
Send your contribution to mplobo@uft.edu.br.

Open Science

The **latex file** for this paper together with other *supplementary files* are available [9].

Ethical conduct of research

This original work was pre-registered under the OSF Preprints [10], please cite it accordingly [11]. This will ensure that researches are conducted with integrity and intellectual honesty at all times and by all means.

Acknowledgement

+ **Center for Open Science**

<https://www.cos.io>

+ **Open Science Framework**

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