

# **Development of a multi-disciplinary toolkit to study time cells in the hippocampus**

A Thesis

Submitted to the  
Tata Institute of Fundamental Research,  
Mumbai  
for the degree of **Doctor of Philosophy**  
in **Biology**

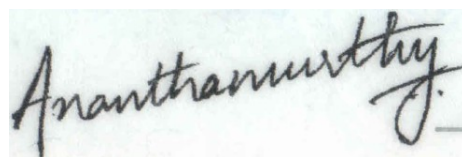
by

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# DECLARATION

This thesis is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgment of collaborative research and discussions.

The work was done under the guidance of Professor Upinder S. Bhalla, at the National Centre for Biological Sciences, Tata Institute of Fundamental Research, Bangalore.



**Kambadur Gundu Ananthamurthy**

In my capacity as supervisor of the candidate's thesis, I certify that the above statements are true to the best of my knowledge.



**Prof. Upinder S. Bhalla**

Date: 21<sup>st</sup> April, 2023