



Tamil Nadu Agricultural University Coimbatore – 641 003



Phone: 0422 - 6611302 Fax: 0422 - 2431821 E-mail: <u>pro@tnau.ac.in</u>

Date: 29.12.2023

Dr.M.Rajavel, Ph.D., Public Relations Officer Mobile: 94890 56730

То

The Editor, Sir,

I request that the following message may kindly be published in your esteemed daily:

TNAU granted Copyright for transcriptomic pipeline NexaHub

Tamil Nadu Agricultural University's Centre for Plant Molecular Biology and Biotechnology, Department of Bioinformatics has received a computer software copyright award for its work on a transcriptomic pipeline NexaHub. The Copyright Office of the Government of India has granted this copyright.

NexaHub, our innovative framework blending Python and Bash commands is designed to revolutionize RNA sequencing analysis. This user-friendly platform streamlines the installation of essential data analysis tools through a simple Bash command, utilizing Python packages like Conda and Mamba for efficiency. Its core feature is a sophisticated graphical user interface (GUI) developed using PyQt5, making it accessible even to those with minimal command-line experience. Currently, NexaHub specializes in RNA sequencing analysis, offering both reference-based and de novo analysis options through a comprehensive module. Users benefit from predefined pipelines for streamlined processing or can opt for a more hands-on approach by running each analysis step separately. What sets NexaHub apart is its error-resistant design and intuitive GUI, overcoming the complexities and potential errors associated with command-line tools. This open-access, GUI-based framework is a standout in the bioinformatics field, offering a convenient, all-in-one solution for RNA sequencing analysis without the burden of expensive licenses. Looking forward, we're excited to expand NexaHub to include genomics, metagenomics, spatial transcriptomics and single-cell RNA analysis, further solidifying its position as a versatile and indispensable tool for researchers worldwide. NexaHub is not just a tool; it's a revolutionary step towards more accessible, efficient bioinformatics analysis, freely available to the scientific community. Dr.V.Geethalakshmi, Vice-Chancellor, TNAU congratulated the Department of Bioinformatics for the copyright award.

Public Relations Officer