New Delhi, Feb 09: Transfer-RNAs (tRNAs) are central molecules in protein synthesis. Recently, tRNAs have emerged as a source for a new class of small-RNAs called tRNA-derived fragments (tRFs). Although studied *in-vitro*, their function at an organismal level remains poorly understood.

A work published in the *RNA journal* (dated Jan 08, 2021) from the laboratory of Dasaradhi Palakodeti at DBT-Institute for Stem Cell Science & Regenerative Medicine (DBT-inStem), provides the first report on planarian tRFs, identifying three different classes of tRFs. Their dynamic expression during regeneration suggests active roles for tRFs in orchestrating this complicated process and the study shows a role in planarian anterior and posterior regeneration. Overall, this study discovers a previously unknown layer of regulation, opening new avenues in the quest to understand regeneration. Dasaradhi Palakodeti is an Associate Investigator at Integrative Chemical Biology (ICB) theme of DBT-inStem.

Lakshmanan V., Sujith T.N., Bansal D., Shivaprasad V.P., Palakodeti D., Krishna S. *RNA* *(2021)* [http://m.rnajournal.cshlp.org/content/early/2021/01/14/rna.077701.120](http://m.rnajournal.cshlp.org/content/early/2021/01/14/rna.077701.120)
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