

Postdoctoral positions in the biology of RNA modifications

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The group of Ramesh Pillai is seeking to recruit 2 postdoctoral fellows to study the role of RNA modifications in gene expression control.

RNA molecules can be modified by over 150 different chemical marks and their importance in gene regulation is being rapidly uncovered. The *N*⁶-methyladenosine (m⁶A) mark is an abundant internal modification on RNAs and this is highly conserved from yeast to plants and animals. RNA methyltransferases ‘write’ this mark on transcripts, and this can be ‘erased’ by demethylases, making it a dynamic regulatory modification. Proteins that can recognize the mark ‘read’ this signal on messages to impact RNA stability, translation, splicing and export. We are interested in understanding the molecular mechanisms underlying the use of RNA modifications in regulating gene expression.

These projects use mouse as the main model organism, and extensively employ protein biochemistry, structural biology and bioinformatics as methods.

More information on current research can be found here:

<https://molbio.unige.ch/en/research-group/ramesh-pillai>

Candidate profile:

A good knowledge of molecular and cellular biology techniques is essential, while a background in RNA research is desirable.

We are looking for candidates with research experience in one of the following areas:

1. Expertise in expression and purification of proteins for biochemistry and structural work (X-ray or CryoEM).
2. Expertise in working with mice, creation of mouse mutants and their analyses.

Apply with a brief motivation letter (~300 words) and a CV to : ramesh.pillai@unige.ch