

MPI-NAT SEMINAR SERIES

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Mechanistic insights into translation re-initiation

mRNA translation in eukaryotes involves recognition of the 5' end of the mRNA by initiation factors, recruitment of the ribosome, and scanning by the ribosome in a 5' to 3' direction as it searches for an initiation codon. Often, the first initiation codon it encounters belongs to an upstream Open Reading Frame (uORF), rather than the main ORF of the transcript. This is the case, for instance, in roughly 50% of oncogenes. If this uORF is translated, the ribosome then needs to 're-initiate' translation on the main ORF. How this happens is not completely understood. I will discuss work the lab has been doing on dissecting this process mechanistically.

Thursday, 6.6.2024, 2 pm Manfred Eigen Lecture Hall

Host: Marina Rodnina & Niels Fischer

