localMND

JPND research
EU Joint Programme – Neurodegenerative Disease Research

Common architecture of local proteome, transcriptome and translatome across motor neuron disorders

Most of the things we enjoy – from things as simple as reading a text to the highly skilled motions of athletes – depend on motor neurons that connect the brain to skeletal muscles throughout the body. At some point in our lives, about one in every 300 of us will experience a degeneration of these nerves, with consequences including progressive paralysis and severe disabilities. The pathogenic processes that lead to MNDs often arise from abnormalities in the way cells splice RNA molecules to create different proteins from the same gene, or transport them to their cellular destinations. Clarifying how these problems produce MNDs by disrupting networks of cellular processes will require diverse expertise.

The localMND consortium combines Chekulaeva lab's work on RNA biology (Berlin Institute for Medical Systems Biology in Germany) with computational expertise from the Ulitsky lab (Weizmann Institute of Science in Israel), studies of neurodegenerative diseases using fly and mouse models at the Sterkebaum lab (Radboud University in the Netherlands), and clinical research at the La Bella group (ALS Clinical Research Center in Italy).

Russell Hodge (Science writer, MDC)

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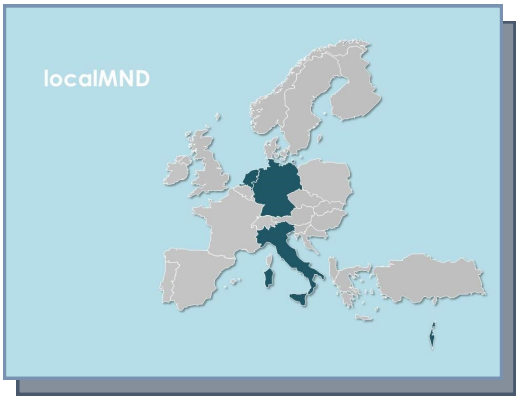
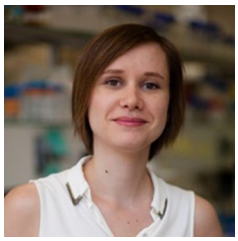


Project Partners:



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