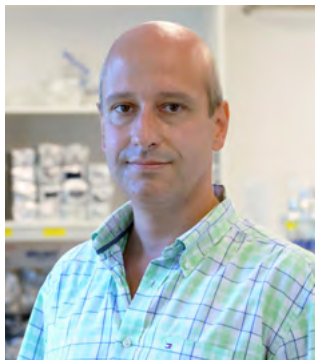


LÓRÁNT SZÉKVÖLGYI



Hungarian cell biologist, researcher

Results for the Talentum Prize 2023 nomination:

His research on the structure of chromatin has proven the role of the Nodulin homeobox (NDX) protein in transposon silencing and in the functioning of the DNA methylation system.

Title of his presentation:

Chromatin structure regulators: the story of Nodulin

Date of presentation: 28 March 2023, 09:00

CAREER

Lóránt Székvölgyi is the head of the Lendület Genome Structure and Recombination research group at the University of Debrecen. His main research interests are epigenetics, genome stability and chromosome spatial structure.

Lóránt Székvölgyi graduated as a molecular biologist at the University of Debrecen in 2002. During his Ph.D. studies, he worked on central problems of chromatin structure at the Institute of Biophysics and Cell Biology, a key result of which was the discovery of ribonucleoprotein particles containing R-loops in the cellular machinery (Székvölgyi L et al. PNAS 2007). During his post-doctoral work he investigated DNA breaks that compromise genome integrity at the Curie Institute in Paris (2008-2010), from where he returned to complete experiments started abroad with the help of a junior OTKA grant. After five years of intensive research, he found a causal link between DNA breaks and the H3K4me3 epigenetic signal, which led to a breakthrough in understanding the relationship between histone modifications and genetic recombination (Acquaviva L & Székvölgyi L et al. Science 2013). His independent research group was established in 2015 with the support of the Hungarian Academy of Sciences' Lendület grant and has since been conducting internationally competitive research at the interface of genomics, molecular biology and bioinformatics. Their results have been published in several high-impact journals, which has paved the way for the research group to become an internationally renowned professional laboratory at the University of Debrecen.

PROFESSIONAL ACHIEVEMENTS

2020-2023	HAS Bolyai János Research Scholarship
2021-2023	New National Excellence Programme Bolyai+ Scholarship
2015	HAS Lendület grant
2017	Győrffy Barna Award (Hungarian Association of Geneticists).
2016	Institut d'études avancées (IMéRA) scholarship (University of Aix-Marseille, France).
2014	Publication Prize of the University of Debrecen
2013-2014	Zoltán Magyary Postdoctoral Fellowship
2012-2016	Marie Curie European Carrier Integration Grant
2008- 2010	Marie Curie intra-European Fellowship
2006	EMBO short-term fellowship