

AP-1 transcription factors mediate BDNF-positive feedback loop in cortical neurons

Tuvikene, Jürgen; Pruunsild, Priit; Orav, Ester; Esvald, Eli-Eelika; Timmusk, Tõnis Journal of neuroscience 2016 / p. 1290-1305 : ill <https://doi.org/10.1523/JNEUROSCI.3360-15.2016> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

CREB family transcription factors are major mediators of BDNF transcriptional autoregulation in cortical neurons

Esvald, Eli-Eelika; Tuvikene, Jürgen; Sirp, Alex; Patil, Sudarshan; Bramham, Clive; Timmusk, Tõnis Journal of neuroscience 2020 / p. 1405-1426 : ill <https://doi.org/10.1523/JNEUROSCI.0367-19.2019> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Differential regulation of the BDNF gene in cortical and hippocampal neurons

Esvald, Eli-Eelika; Tuvikene, Jürgen; Moistus, Andra; Rannaste, Käthy; Kõomägi, Susann; Timmusk, Tõnis Journal of neuroscience 2022 / p. 9110-9128 <https://doi.org/10.1523/JNEUROSCI.2535-21.2022> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Dissecting stimulus-dependent transcription of brain-derived neurotrophic factor = Aju-päritolu neurotroofse teguri stiimulsõltnuva transkriptsiooni uuringud

Esvald, Eli-Eelika 2023 <https://doi.org/10.23658/taltech.32/2023> <https://digikogu.taltech.ee/et/Item/6222c009-c82d-4efb-98c2-51bf2f148b52> https://www.ester.ee/record=b5567508*est

An 840 kb distant upstream enhancer is a crucial regulator of catecholamine-dependent expression of the BDNF gene in astrocytes

Avarlaid, Annela; Esvald, Eli-Eelika; Koppel, Indrek; Parkman, Annabel; Zhuravskaya, Anna; Makeyev, Eugene V.; Tuvikene, Jürgen; Timmusk, Tõnis Glia 2024 / p. 90-110 : ill <https://doi.org/10.1002/glia.24463> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estonian scientists' find could pave the way for new depression treatment

err.ee 2025 <https://news.err.ee/1609664915/estonian-scientists-find-could-pave-the-way-for-new-depression-treatment> <https://doi.org/10.1523/JNEUROSCI.0313-24.2025>

High-intensity interval and moderate-intensity continuous training on cerebral energy metabolism in older rats.

Marcourt, Cecile; Rivera, Claudio; Tuvikene, Jürgen; Langeard, Antoine; Esvald, Eli-Eelika; Cabrera-Cabrera, Florencia; Timmusk, Tõnis; Temprado, Jean-Jacques; Laurin, Jerome GeroScience 2025 / 16 p <https://doi.org/10.1007/s11357-025-01820-5>

Intronic enhancer region governs transcript-specific Bdnf expression in rodent neurons

Tuvikene, Jürgen; Esvald, Eli-Eelika; Rähni, Annika; Uustalu, Kaie; Zhuravskaya, Anna; Avarlaid, Annela; Makeyev, Eugene V.; Timmusk, Tõnis eLife 2021 / art. e65161 <https://doi.org/10.7554/eLife.65161> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Revisiting the expression of BDNF and its receptors in mammalian development

Esvald, Eli-Eelika; Tuvikene, Jürgen; Kiir, Carl Sander; Avarlaid, Annela; Tamberg, Laura; Sirp, Alex; Shubina, Anastassia; Cabrera-Cabrera, Florencia; Pihlak, Arno; Koppel, Indrek; Palm, Kaia; Timmusk, Tõnis Frontiers in Molecular Neuroscience 2023 / art. 1182499 <https://doi.org/10.3389/fnmol.2023.1182499> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Stimulus-Dependent Expression of Bdnf Is Mediated by ATF2, MYT1L, and EGR1 Transcription Factors

Esvald, Eli-Eelika; Moistus, Andra; Lehe, Karin; Avarlaid, Annela; Subina, Anastassia; Kuusemets, Liis; Tuvikene, Jürgen; Timmusk, Tõnis Journal of Neuroscience 2025 / art. e0313242025 <https://doi.org/10.1523/JNEUROSCI.0313-24.2025>

Untranslated regions of brain-derived neurotrophic factor (Bdnf) mRNA control its translatability and subcellular localization

Lekk, Ingrid; Cabrera-Cabrera, Florencia; Turconi, Giorgio; Tuvikene, Jürgen; Esvald, Eli-Eelika; Rähni, Annika; Casserly, Laoise; Garton, Daniel R.; Andressoo, Jaan-Olle; Timmusk, Tõnis; Koppel, Indrek The journal of biological chemistry 2023 / art. 102897 <https://doi.org/10.1016/j.jbc.2023.102897> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)