

Alzheimeri ravi võib peituda mälus

Timmusk, Tõnis; Bramham, Clive Postimees 2017 / lk. 26-27

Altered expression profile of igLON family of neural cell adhesion molecules in the dorsolateral prefrontal cortex of schizophrenic patients

Karis, Karina; Eskla, Katri-Liis; Kaare, Maria; Täht, Karin; Tuusov, Jana; Visnapuu, Tanel; Innos, Jürgen; **Timmusk, Tõnis** Frontiers in Molecular Neuroscience 2018 / art. 8 <https://doi.org/10.3389/fnmol.2018.00008> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Alternative splicing and expression of human and mouse NFAT genes

Vihma, Hanna; Pruunsild, Priit; **Timmusk, Tõnis** Genomics 2008 / p. 279-291 : ill
https://www.researchgate.net/publication/23145218_Alternative_splicing_and_expression_of_human_and_mouse_NFAT_genes

Alusuuringud on Eesti riigile hädavajalikud : teadlaste märgukiri

Allik, Jüri; Engelbrecht, Jüri; Saarma, Mart; **Timmusk, Tõnis** Eesti Päevaleht 2004 / lk. 3

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>

BAC transgenic mice reveal distal cis-regulatory elements governing BDNF gene expression

Koppel, Indrek; Aid-Pavlidis, Tamara; Jaanson, Kaur; Sepp, Mari; Palm, Kaia; **Timmusk, Tõnis** Genesis 2010 / 4, p. 214-219

BAC-based cellular model for screening regulators of BDNF gene transcription

Jaanson, Kaur; Sepp, Mari; Aid-Pavlidis, Tamara; **Timmusk, Tõnis** BMC neuroscience 2014 / p. 1-12 : ill

Bidirectional transcription from human LRRTM2/CTNNA1 and LRRTM1/CTNNA2 gene loci leads to expression of N-terminally truncated CTNNA1 and CTNNA2 isoforms

Kask, Martin; Pruunsild, Priit; **Timmusk, Tõnis** Biochemical and biophysical research communications 2011 / p. 56-61 : ill
<https://pubmed.ncbi.nlm.nih.gov/21708131/>

Brain-derived neurotrophic factor expression in vivo is under the control of neuron-restrictive silencer element

Timmusk, Tõnis; Palm, Kaia; Lendahl, U.; **Metsis, Madis** Journal of biological chemistry 1999 / p. 1078-1084

The CB₁ cannabinoid receptor signals striatal neuroprotection via a PI3K/Akt/mTORC1/BDNF pathway

Blazquez, C.; Chiarlone, A.; **Pruunsild, Priit**; **Timmusk, Tõnis** Cell death and differentiation 2015 / p. 1618-1629 : ill
<https://doi.org/10.1038/cdd.2015.11>

Cell type-specific labelling of newly synthesized proteins by puromycin inactivation

Cabrera-Cabrera, Florencia; Tull, Helena; Capuana, Roberta; Kasvandik, Sergio; **Timmusk, Tõnis**; **Koppel, Indrek** Journal of biological chemistry 2023 / art. 105129 <https://doi.org/10.1016/j.jbc.2023.105129>

Cocaine-induced epigenetic DNA modification in mouse addiction-specific and non-specific tissues

Anier, Kaili; Urb, Mari; Kipper, Karin; Herodes, Koit; **Timmusk, Tõnis** Neuropharmacology 2018 / p. 13-25
<https://doi.org/10.1016/j.neuropharm.2018.06.036> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Corticosterone induces DNA methyltransferases expression in rat cortical neurons

Urb, Mari; Anier, Kaili; Matsalu, Terje; Aonurm-Helm, Anu; **Timmusk, Tõnis** SpringerPlus 2015 / p. 30, P50
<http://dx.doi.org/10.1186/2193-1801-4-S1-P50>

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](#)

Daughterless, the Drosophila orthologue of TCF4, is required for associative learning and maintenance of the synaptic proteome

Tamberg, Laura; Jaago, Mariliis; Säälk, Kristi; **Sirp, Alex**; **Tuvikene, Jürgen**; Šubina, Anastassia; Kiir, Carl Alexander; **Nurm, Kaja**; **Sepp, Mari**; **Timmusk, Tõnis**; **Palgi, Mari** Disease Models & Mechanisms 2020 / art. dmm042747, 15 p. : ill
<https://doi.org/10.1242/dmm.042747> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Deciphering molecular basis of Schwann cell development = Schwanni rakkude arengu molekulaarse mehhanismide selgitamine

Piirsoo, Marko; **Timmusk, Tõnis**; Meijer, Dies 2009 https://www.ester.ee/record=b2546066*est

Dendritic localization of mammalian neuralized mRNA encoding a protein with transcription repression activities
Timmusk, Tõnis; Palm, Kaia; Belluardo, N.; Mudo, G.; Neuman, Toomas Molecular and cellular neurosciences 2002 / 4, p. 649-668

Differential patterns of cross-reactive antibody response against SARS-CoV-2 spike protein detected for chronically ill and healthy COVID-19 naïve individuals

Jaago, Mariliis; Rähni, Annika; Pupina, Nadezda; Sadam, Helle; Tuvikene, Jürgen; Avarlaid, Annela; Planken, Anu; Planken, Margus; Haring, Liina; Vasar, Eero; Bacevic, Miljana; Lambert, France; Kalso, Eija; Pussinen, Pirkko; Tienari, Pentti J.; Vaheri, Antti; Lindholm, Dan; Timmusk, Tõnis; Ghaemmaghami, Amir M.; Palm, Kaia Scientific reports 2022 / art. 16817 : ill
<https://doi.org/10.1038/s41598-022-20849-6> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Differential regulation of Bdnf expression in cortical neurons by class-selective histone deacetylase inhibitors

Koppel, Indrek; Timmusk, Tõnis Neuropharmacology 2013 / p. 106-115 : ill

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

Dopamine crossreacts with adrenoreceptors in cortical astrocytes to induce BDNF expression, CREB signaling and morphological transformation

Koppel, Indrek; Jaanson, Kaur; Klasche, Airi; Tuvikene, Jürgen; Tiirik, Tõnis; Pärn, Angela; Timmusk, Tõnis GLIA 2018 / p. 206-216 : ill <https://doi.org/10.1002/glia.23238> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Drastic effects on the microbiome of a young rower engaged in high-endurance exercise after a month usage of a dietary fiber supplement

Jaago, Mariliis; Timmusk, Uku Siim; Timmusk, Tõnis; Palm, Kaia Frontiers in Nutrition 2021 / art. #654008, 11 p. : ill
<https://doi.org/10.3389/fnut.2021.654008> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Eesti teadlased otsivad ravi levinud haigusele, mis ajab silmad villi [Võrguväljaanne]

Timmusk, Tõnis novaator.err.ee 2021 / fot [Eesti teadlased otsivad ravi levinud haigusele, mis ajab silmad villi](#)

Efficient use of a translation start codon in BDNF exon I

Koppel, Indrek; Tuvikene, Jürgen; Lekk, Ingrid; Timmusk, Tõnis Journal of neurochemistry 2015 / p. 1015-1025 : ill
<http://dx.doi.org/10.1111/jnc.13124>

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 2023 <https://doi.org/10.1002/glia.24463>

Electrochemical sensor based on molecularly imprinted polymer for rapid quantitative detection of brain-derived neurotrophic factor

Ayankojo, Akinrinade George; Boroznjak, Roman; Reut, Jekaterina; Tuvikene, Jürgen; Timmusk, Tõnis; Sõritski, Vitali Sensors and Actuators B: Chemical 2023 / art. 134656 <https://doi.org/10.1016/j.snb.2023.134656>

Expression analysis of the CLCA gene family in mouse and human with emphasis on the nervous system

Piirsoo, Marko; Meijer, Dies; Timmusk, Tõnis BMC developmental biology 2009 / p. 10 : ill
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2653474/>

Expression and alternative splicing of mouse Gfra4 suggests roles in endocrine cell development

Lindahl, Maria; Timmusk, Tõnis; Rossi, J.; Saarma, Mart; Airaksinen, Matti S. Molecular and cellular neuroscience 2000 / p. 522-533

Expression of alternative transcription factor 4 mRNAs and protein isoforms in the developing and adult rodent and human tissues

Sirp, Alex; Shubina, Anastassia; Tuvikene, Jürgen; Tamberg, Laura; Kiir, Carl Sander; Kranich, Laura; Timmusk, Tõnis Frontiers in Molecular Neuroscience 2022 / art. 1033224 <https://doi.org/10.3389/fnmol.2022.1033224> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Expression of NGF and GDNF family members and their receptors during peripheral nerve development and differentiation of Schwann cells in vitro

Piirsoo, Marko; Kaljas, Anne; Tamm, Karin; Timmusk, Tõnis Neuroscience letters 2010 / 1, p. 135-140 : ill

Forkhead transcription factor FOXO3a levels are increased in Huntington disease because of overactivated positive autofeedback loop

Kannike, Kaja; Sepp, Mari; Zuccato, Chiara; Cattaneo, Elena; Timmusk, Tõnis Journal of biological chemistry 2014 / p. 32845-32857 : ill

Fragment-based QSAR approach for novel indole-like TrkA receptor antagonist

Tammiku-Taul, Jaana; Dobchev, Dimitar Atanasov; Karelson, Mati; Timmusk, Tõnis; Park, Rahel; Jaanson, Kaur; Luberg, Kristi; Kananovich, Dzmitry; Noole, Artur; Kanger, Tõnis; Lopp, Margus 8th International Symposium on Computational Methods in Toxicology and Pharmacology Integrating Internet Resources (CMTPI-2015) : Chios, Greece, June 21-25, 2015 : book of abstracts 2015 / p. 68

The Fuchs corneal dystrophy-associated CTG repeat expansion in the TCF4 gene affects transcription from its alternative promoters

Sirp, Alex; Leite, Kristian; Tuvikene, Jürgen; Nurm, Kaja; Sepp, Mari; Timmusk, Tõnis Scientific reports 2020 / art. 18424
<https://doi.org/10.1038/s41598-020-75437-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Functional consequences of TCF4 missense substitutions associated with Pitt-Hopkins syndrome, mild intellectual disability, and schizophrenia

Sirp, Alex; Roots, Kaisa; Nurm, Kaja; Tuvikene, Jürgen; Sepp, Mari; Timmusk, Tõnis The journal of biological chemistry 2021 / art. 101381 <https://doi.org/10.1016/j.jbc.2021.101381> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Functional diversity of human basic helix-loop-helix transcription factor TCF4 isoforms generated by alternative 5' exon usage and splicing

Sepp, Mari; Kannike, Kaja; Eesmaa, Ave; Urb, Mari; Timmusk, Tõnis PLoS ONE 2011 / p. e22138 [14 p.] : ill

Glucocorticoid receptor stimulation resulting from early life stress affects expression of DNA methyltransferases in rat prefrontal cortex

Urb, Mari; Anier, Kaili; Matsalu, Terje; Koppel, Indrek; Timmusk, Tõnis Journal of molecular neuroscience 2019 / p. 99–110 : ill
<https://doi.org/10.1007/s12031-019-01286-z> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Haruldane haigus võib anda viiteid skisofreenia raviks : [TTÜ professori Tõnis Timmuski ning kahe teaduri, Mari Sepa ja Priit Pruunsilla artikli põhjal]

Aru, Erik; Timmusk, Tõnis; Sepp, Mari; Pruunsild, Priit Mente et Manu 2012 / lk. 2 https://www.ester.ee/record=b1242496*est

Human glial cell line-derived neurotrophic factor receptor alpha4 is the receptor for persephin, and is predominantly expressed in normal and malignant thyroid medullary cells

Lindahl, Maria; Poteryaev, Dmitry; Yu, Liying; Arumäe, Urmas; Timmusk, Tõnis; Bongarzone, Italia; Aiello, Antonella; Pierotti, Marco A.; Airaksinen, Matti S.; Saarma, Mart Journal of biological chemistry 2001 / 12, p. 9344-9351 : ill
<https://doi.org/10.1074/jbc.M008279200>

Human TrkB gene : novel alternative transcripts, protein isoforms and expression pattern in the prefrontal cerebral cortex during postnatal development

Luberg, Kristi; Wong, Jenny; Weickert, Cynthia Shannon; Timmusk, Tõnis Journal of neurochemistry 2010 / 4, p. 952-964 : ill

Huntingtin interacts with REST/NRSF to modulate the transcription of NRSE-controlled neuronal genes

Zuccato, Chiara; Tartari, Marzia; Timmusk, Tõnis Nature genetics 2003 / 1, p. 76-83

Identification of cis-elements and transcription factors regulating neuronal activity-dependent transcription of human BDNF gene

Pruunsild, Priit; Sepp, Mari; Orav, Ester; Koppel, Indrek; Timmusk, Tõnis The journal of neuroscience 2011 / p. 3295-3308 : ill

Immune response to a conserved enteroviral epitope of the major capsid VP1 protein is associated with lower risk of cardiovascular disease

Pupina, Nadežda; Avarlaid, Annela; Sadam, Helle; Pihlak, Arno; Jaago, Mariliis; Tuvikene, Jürgen; Rähni, Annika; Planken, Anu; Planken, Margus; Kalso, Eija; Tienari, Pentti J.; Nieminen, Janne K.; Seppänen, Mikko R.J.; Vaheri, Antti; Lindholm, Dan; Sinisalo, Juha; Pussinen, Pirkko; Timmusk, Tõnis; Palm, Kaia eBioMedicine 2022 / art. 103835, 14 p. : ill
<https://doi.org/10.1016/j.ebiom.2022.103835> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Indole-like Trk receptor antagonists

Tammiku-Taul, Jaana; Park, Rahel; Jaanson, Kaur; Luberg, Kristi; Dobchev, Dimitar Atanasov; Kananovich, Dzmitry; Noole, Artur; Mandel, Merle; Kaasik, Allen; Lopp, Margus; Timmusk, Tõnis; Karelson, Mati European journal of medicinal chemistry 2016 / p. 541-552 : ill <https://doi.org/10.1016/j.ejmech.2016.06.003>

Inimaju asümmeetriast, käelisusest ja skisofreeniast

Koppel, Indrek; Pruunsild, Priit; Timmusk, Tõnis Tallinna Tehnikaülikooli aastaraamat 2007 2008 / lk. 109-112

The intellectual disability and schizophrenia associated transcription factor TCF4 is regulated by neuronal activity and protein kinase A

Sepp, Mari; Vihma, Hanna; Nurm, Kaja; Urb, Mari; Page, Stephanie Cerceo; Roots, Kaisa; Hark, Anu; Maher, Brady J.;

Pruunsild, Priit; Timmusk, Tõnis Journal of neuroscience 2017 / p. 10516-10527 : ill <https://doi.org/10.1523/JNEUROSCI.1151-17.2017>

Introducing Pitt-Hopkins syndrome-associated mutations of TCF4 to Drosophila daughterless

Tamberg, Laura; Sepp, Mari; Timmusk, Tõnis; Palgi, Mari Biology open 2015 / p. 1762-1771 : ill
<http://dx.doi.org/10.1242/bio.014696>

Introducing Pitt-Hopkins Syndrome-associated mutations of TCF4 to Drosophila daughterless : [conference paper]

Palgi, Mari; Tamberg, Laura; Timmusk, Tõnis VI Baltic Genetics Congress : September 30 - October 3, 2015, Institute of Molecular and Cell Biology, Tartu, Estonia : book of abstracts 2015 / 1 p

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](#)

Isoform-specific reduction of the basic helix-Loop-helix transcription factor TCF4 levels in Huntington's disease

Nurm, Kaja; Sepp, Mari; Castany-Pladevall, Carla; Creus-Muncunill, Jordi; Tuvikene, Jürgen; Sirp, Alex; Vihma, Hanna; Blake, Derek J.; Perez-Navarro, Esther; Timmusk, Tõnis eNeuro 2021 / 53 p. : ill <https://doi.org/10.1523/ENEURO.0197-21.2021> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Keemia ja molekulaarbioloogia valdkonna aastapreemia tööde tsükli "Neuraalse aktiivsusega reguleeritud geeniekspressiooni mehhanismid" eest : Tõnis Timmusk. Neuraalse aktiivsusega reguleeritud geeniekspressiooni mehhanismid

Timmusk, Tõnis Eesti Vabariigi preemiad 2020 : teadus. F. J. Wiedemanni keeleauhind. Sport. Kultuur. Haridus 2020 / lk. 74-90 : ill., portr https://www.ester.ee/record=b1226072*est

Käelisuse ja skisofreenia seostest

Timmusk, Tõnis Horisont 2010 / 5, lk. 6 : portr https://artiklid.elnet.ee/record=b2155629*est

Long-lasting behavioural and molecular alterations induced by early postnatal fluxetine exposure are restored by chronic fluxetine treatment in adult mice

Karpova, Nina N.; Lindholm, Jesse; Pruunsild, Priit; Timmusk, Tõnis; Castren, Eero European neuropsychopharmacology 2009 / p. 97-108 : ill <https://pubmed.ncbi.nlm.nih.gov/18973993/>

LRRTM1 on chromosome 2p12 is a maternally suppressed gene that is associated paternally with handedness and schizophrenia

Francks, C.; Maegawa, S.; Timmusk, Tõnis; Pruunsild, Priit; Koppel, Indrek Molecular psychiatry 2007 / p. 1129-1139
https://www.researchgate.net/publication/6171287_LRRTM1_on_chromosome_2p12_is_a_maternally_suppressed_gene_that_is_associated_paternally_with_handedness_and_schizophrenia

MANF is widely expressed in mammalian tissues and differently regulated after ischemic and epileptic insults in rodent brain

Lindholm, Päivi; Peränen, Johan; Andressoo, Jaan-Olle; Kalkkinen, Nisse; Kokaia, Zaal; Lindvall, Olle; Timmusk, Tõnis; Saarma, Mart Molecular and cellular neuroscience 2008 / p. 356-371 : ill

Melanoma-specific antigen-associated antitumor antibody reactivity as an immune-related biomarker for targeted immunotherapies

Rähni, Annika; Jaago, Mariliis; Sadam, Helle; Pupina, Nadežda; Pihlak, Arno; Tuvikene, Jürgen; Annuk, Margus; Mägi, Andrus; Timmusk, Tõnis; Ghaemmaghami, Amir M.; Palm, Kaia Communications medicine 2022 / 11 p. : ill <https://doi.org/10.1038/s43856-022-00114-7>

Meta-coexpression conservation analysis of microarray data: a "subset" approach provides insight into brain-derived neurotrophic factor regulation

Aid-Pavlidis, Tamara; Pavlidis, Pavlos; Timmusk, Tõnis BMC genomics 2009 / p. 420 : ill

Mouse and rat BDNF gene structure and expression revisited

Aid-Pavlidis, Tamara; Kazantseva, Anna; Piirsoo, Marko; Palm, Kaia; Timmusk, Tõnis Journal of neuroscience research 2007 / 3, p. 525-535

Neuralized family member NEURL1 is a ubiquitin ligase for the cGMP-specific phosphodiesterase 9A

Taal, Kati; Tuvikene, Jürgen; Rullinkov, Grete; Piirsoo, Marko; Sepp, Mari; Neuman, Toomas; Tamme, Richard; Timmusk, Tõnis Scientific reports 2019 / art. 7104, 12 p. : ill <https://doi.org/10.1038/s41598-019-43069-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Neuralized-2: expression in human and rodents and interaction with Delta-like ligands

Rullinkov, Grete; Tamme, Richard; Sarapuu, Anzelika; Lauren, Juha; Sepp, Mari; Palm, Kaia; Timmusk, Tõnis Biochemical

Neuronal expression of zinc finger transcription factor REST/NRSF/XBR gene

Palm, Kaia; Belluardo, N.; **Metsis, Madis**; Timmusk, Tõnis Journal of neuroscience 1998 / p. 1280-1296

Neuronal K⁺/Cl⁻ co-transporter (KCC2) transgenes lacking neurone restrictive silencer element recapitulate CNS neurone-specific expression and developmental up-regulation of endogenous KCC2 gene

Uvarov, Pavel; Pruunsild, Priit; Timmusk, Tõnis; Airaksinen, Matti S. Journal of neurochemistry 2005 / 4, p. 1144-1155
<https://pubmed.ncbi.nlm.nih.gov/16271048/>

Neuronal specific splicing of zinc finger transcription factor REST/NRSF/XBR is widespread in neuroblastomas and conserved in human, rat and mouse

Palm, Kaia; **Metsis, Madis**; Timmusk, Tõnis Mol. brain res 1999 / p. 30-39

Neuronal-activity regulated gene expression : emphasis on BDNF

Timmusk, Tõnis SpringerPlus 2015 / p. 11, L38 <http://dx.doi.org/10.1186/2193-1801-4-S1-L38>

Neuron-specific Bcl-2 homology 3 domain-only splice variant of Bak is anti-apoptotic in neurons, but pro-apoptotic in non-neuronal cells

Sun, Yun-Fu; Yu, Li-Ying; **Saarma, Mart**; Timmusk, Tõnis; Arumäe, Urmas Journal of biological chemistry 2001 / 19, p. 16240-16247 : ill

Neurotrofiinid ja nende koht normis ja patoloogias

Timmusk, Tõnis Tallinna Tehnikaülikooli aastaraamat 2004 2005 / lk. 46-49

Neurotroofsed tegurid

Timmusk, Tõnis; Koppel, Indrek; Pruunsild, Priit; Sepp, Mari; Tamme, Richard Eesti Arst 2007 / 9, lk. 614-621

<https://eestiarst.ee/neurotroofsed-tegurid/> https://artiklid.elnet.ee/record=b1059643*est

Neurotrophins : transcription and translation

West, A. E.; **Pruunsild, Priit; Timmusk, Tõnis** Neurotrophic factors 2014 / p. 67-100

NF-κB-dependent regulation of brain-derived neurotrophic factor in hippocampal neurons by X-linked inhibitor of apoptosis protein

Kairisalo, Minna; Korhonen, Laura; **Sepp, Mari; Pruunsild, Priit**; Kukkonen, Jyrki; Kivinen, Jenni; **Timmusk, Tõnis**; Blomgren, Klas; Lindholm, Dan European journal of neuroscience 2009 / 6, p. 958-966 : ill

A novel gene family encoding leucine-rich repeat transmembrane proteins differentially expressed in the nervous system

Lauren, Juha; Airaksinen, Matti S.; **Saarma, Mart; Timmusk, Tõnis** Genomics 2003 / 4, p. 411-421 : ill

Novel neurotrophic factor CDNF protects and rescues midbrain dopamine neurons in vivo

Lindholm, Päivi; **Timmusk, Tõnis; Saarma, Mart** Nature 2007 / p. 73-77

A novel N-terminal isoform of the neuron-specific K-Cl cotransporter KCC2

Uvarov, Pavel; Ludwig, Anastasia; Markkanen, Marika; Pruunsild, Priit; Kaila, Kai; Delpire, Eric; **Timmusk, Tõnis**; Rivera, Claudio; Airaksinen, Matti S. Journal of biological chemistry 2007 / 42, p. 30570-30576

Novel transcripts reveal a complex structure of the human TRKA gene and imply the presence of multiple protein isoforms

Luberg, Kristi; Park, Rahel; Aleksejeva, Elina; Timmusk, Tõnis BMC neuroscience 2015 / p. 1-21 : ill

<http://dx.doi.org/10.1186/s12868-015-0215-x>

N-terminally truncated BAF57 isoforms contribute to the diversity of SWI/SNF complexes in neurons

Kazantseva, Anna; **Sepp, Mari**; Kazantseva, Jekaterina; Sadam, Helle; **Pruunsild, Priit; Timmusk, Tõnis; Neuman, Toomas**; Palm, Kaia Journal of neurochemistry 2009 / 3, p. 807-818 : ill

Nuclear factor of activated T-cells isoform c4 (NFATc4/NFAT3) as a mediator of anti-apoptotic transcription in NMDA receptor-stimulated cortical neurons

Vashishta, Aruna; Habas, Agata; **Pruunsild, Priit; Zheng, Jing-Juan; Timmusk, Tõnis**; Hetman, Michal Journal of neuroscience 2009 / 48, p. 15331-15340

Nucleolar enrichment of brain proteins with critical roles in human neurodevelopment

Slomnicki, Lukasz P.; Malinowska, Agata; **Sepp, Mari; Timmusk, Tõnis** Molecular & cellular proteomics 2016 / p. 2055-2075

<http://dx.doi.org/10.1074/mcp.M115.051920>

Närvisüsteemi haiguste molekulaarsetest mehhanismidest : kommentaar Eesti Vabariigi teaduse aastapreemia pälvinud tööde tsüklile

Timmusk, Tõnis Tallinna Tehnikaülikooli aastaraamat 2008 2009 / lk. 299-304

Partial deletion of TCF4 in three generation family with nonsyndromic intellectual disability, without features of Pitt-Hopkins syndrome

Kharbanda, Mira; **Kannike, Kaja**; Lampe, Anne; Berg, Jonathan; **Timmusk, Tõnis**; **Sepp, Mari** European journal of medical genetics 2016 / p. 310-314 : ill <http://dx.doi.org/10.1016/j.ejmg.2016.04.003>

PCSK9 deficiency alters brain lipid composition without affecting brain development and function

Pärn, Angela; Olsen, Ditte; **Tuvikene, Jürgen**; Kaas, Mathias; Borisova, Ekaterina; Bilgin, Mesut; Elhauge, Mie; Vilstrup, Joachim; Madsen, Peder; Ambrozkiwicz, Mateusz C.; Goz, Roman U.; **Timmusk, Tõnis**; Tarabykin, Victor; Gustafsen, Camilla; Glerup, Simon Frontiers in molecular neuroscience 2023 <https://doi.org/10.3389/fnmol.2022.1084633>

PGC-1 α signaling increases GABA(A) receptor subunit $\alpha 2$ expression, GABAergic neurotransmission and anxiety-like behavior in mice

Vanaveski, Taavi; Molchanova, Svetlana; Pham, Dan Duc; Schäfer, Annika; Pajanoja, Ceren; Narvik, Jane; Srinivasan, Vignesh; Urb, Mari; Koivisto, Maria; **Timmusk, Tõnis** Frontiers in Molecular Neuroscience 2021 / art. 588230

<https://doi.org/10.3389/fnmol.2021.588230> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Pitt–Hopkins syndrome-associated mutations in TCF4 lead to variable impairment of the transcription factor function ranging from hypomorphic to dominant-negative effects

Sepp, Mari; Pruunsild, Priit; **Timmusk, Tõnis** Human molecular genetics 2012 / p. 2873-2888

Rakuvälise serotoniini tasemed ja neurotroofiliste faktorite ekspressioon kõrge või madala uudistamisaktiivsusega rottidel

Harro, Jaanus; Mällo, Tanel; Kõiv, Kadri; **Koppel, Indrek**; Raudkivi, Karita; Uustare, Ain; Rinken, Ago; **Timmusk, Tõnis** XXX Eesti keemiapäevad : teaduskonverentsi teesid = 30th Estonian Chemistry Days : abstracts of scientific conference 2007 / lk. 32-33

Rat NEURL1 3'UTR is alternatively spliced and targets mRNA to dendrites

Jaagura, Madis; Taal, Kati; **Koppel, Indrek**; **Tuvikene, Jürgen**; **Timmusk, Tõnis**; **Tamme, Richard** Neuroscience letters 2016 / p. 71-76 : ill <https://doi.org/10.1016/j.neulet.2016.10.041>

Regulation of different human NFAT isoforms by neuronal activity

Vihma, Hanna; **Luhakooder, Mirjam**; **Pruunsild, Priit**; **Timmusk, Tõnis** Journal of neurochemistry 2016 / p. 394-408 : ill <http://dx.doi.org/10.1111/jnc.13568>

Regulation of extracellular serotonin levels and brain-derived neurotrophic factor in rats with high and low exploratory activity

Mällo, Tanel; Kõiv, Kadri; **Koppel, Indrek**; Raudkivi, Karita; Uustare, Ain; Rinken, Ago; **Timmusk, Tõnis**; Harro, Jaanus Brain research 2008 / p. 110-117 : ill <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2568862/>

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 <https://doi.org/10.3389/fnmol.2023.1182499>

The role of DNA methyltransferase activity in cocaine treatment and withdrawal in the nucleus accumbens of mice

Urb, Mari; Niinep, Kerly; Matsalu, Terje; Kipper, Karin; Herodes, Koit; Zharkovsky, Alexander; **Timmusk, Tõnis**; Anier, Kaili; Kalda, Anti Addiction Biology 2020 / art. e12720 <https://doi.org/10.1111/adb.12720> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structure, alternative splicing, and expression of the human and mouse KCNIP gene family

Pruunsild, Priit; **Timmusk, Tõnis** Genomics 2005 / 5, p. 581-593 <https://pubmed.ncbi.nlm.nih.gov/16112838/>

Subcellular localization and transcription regulatory potency of KCNIP/Calsenilin/DREAM/KChIP proteins in cultured primary cortical neurons do not provide support for their role in CRE-dependent gene expression

Pruunsild, Priit; **Timmusk, Tõnis** Journal of neurochemistry 2012 / p. 29-43

Sumoylation regulates the transcriptional activity of different human NFAT isoforms in neurons

Vihma, Hanna; **Timmusk, Tõnis** Neuroscience letters 2017 / p. 302-307 : ill <http://dx.doi.org/10.1016/j.neulet.2017.05.074>

Targeted expression of a multifunctional chimeric neurotrophin in the lesioned sciatic nerve accelerates regeneration of sensory and motor axons

Funakoshi, H.; Risling, M.; Carlstedt, T.; Lendahl, U.; **Timmusk, Tõnis**; **Metsis, Madis**; Yamamoto, Y.; Ibanez, C.F. Proceedings of the National Academy of Sciences of the United States of America 1998 / p. 5269-5274

Teaduspreemia arstiteaduse alal publikatsioonide tsükli "Närvisüsteemi haiguste molekulaarsetest mehhanismidest" eest : Tõnis Timmusk

Timmusk, Tõnis Eesti Vabariigi teaduspreemiad 2008 2008 / lk. 98-109 : portr

Tissue-specific and neural activity-regulated expression of human BDNF gene in BAC transgenic mice

Koppel, Indrek; Aid-Pavlidis, Tamara; Jaanson, Kaur; Sepp, Mari; Pruunsild, Priit; Palm, Kaia; Timmusk, Tõnis BMC neuroscience 2009 / p. 68 <https://psycnet.apa.org/record/2009-11273-001>

TTÜ geeniteadlased muugivad haruldast haigust, mida põeb viis inimest miljonist

Tammeorg, Teele; Timmusk, Tõnis Eesti Päevaleht 2016 / lk. 22-23

Two novel mammalian nogo receptor homologs differentially expressed in the central and peripheral nervous systems

Lauren, Juha; Airaksinen, Matti S.; **Saarma, Mart; Timmusk, Tõnis** Molecular and cellular neuroscience 2003 / 3, p. 581-594 <https://www.sciencedirect.com/science/article/pii/S1044743103001994>

2-Deoxyglucose drives plasticity via an adaptive ER stress-ATF4 pathway and elicits stroke recovery and Alzheimer's resilience

Kumar, Amit; Karuppagounder, Saravanan S.; Chen, Yingxin; Corona, Carlo; Kawaguchi, Riki; Chen, Yuyan; Balkaya, Mustafa; Sagdullaev, Botir T.; Wen, Zhexiong; Stuart, Charles; Cho, Sunghee; Ming, Guo-li; **Tuvikene, Jürgen; Timmusk, Tõnis**; Geschwind, Daniel H.; Ratan, Rajiv R. Neuron 2023 / p. 2831-2846.e10 <https://doi.org/10.1016/j.neuron.2023.06.013>

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>

Usage of bacterial artificial chromosomes for studying BDNF gene regulation in primary cultures of cortical neurons and astrocytes

Jaanson, Kaido; Pärn, Angela; **Timmusk, Tõnis** Brain-derived neurotrophic factor (BDNF) 2019 / p. 13-25 https://doi.org/10.1007/7657_2018_10 [Conference proceedings at Scopus](#) [Article at Scopus](#)