

Adaptation of striated muscles to Wolframin deficiency in mice : alterations in cellular bioenergetics

Tepp, Kersti; Puurand, Marju; Timohhina, Natalja; **Aid-Vanakova, Jekaterina**; Reile, Indrek; Ševtšuk, Igor; Tšekulajev, Vladimir; Eimre, Margus; Peet, Nadežda; Kadaja, Lumme; Paju, Kalju; Käämbre, Tuuli Biochimica et biophysica acta 2020 / art. 129523 <https://doi.org/10.1016/j.bbagen.2020.129523>

Adenylate kinase and metabolic signaling in cancer cells

Klepinin, Aleksandr; Zhang, Song; **Klepinina, Ljudmila**; **Rebane-Klemm, Egle**; Terzic, Andre; Käämbre, Tuuli; Dzeja, Petras Frontiers in oncology 2020 / art. 660, 9 p <https://doi.org/10.3389/fonc.2020.00660>

A chemoenzymatic approach to the preparation of optically active alpha-bromo-omega-hydroxy aldehyde hemiacetals

Parve, Omar; **Vallikivi, Imre**; Lahe, Lilja; Sikk, Peeter; Käämbre, Tuuli; **Lille, Ülo** Proceedings of the Estonian Academy of Sciences. Chemistry 1997 / 4, p. 186-190

Colorectal polyps increase the glycolytic activity

Rebane-Klemm, Egle; **Reinsalu, Leenu**; Puurand, Marju; Ševtšuk, Igor; Bogovskaja, Jelena; Suurmaa, Külliki; Valvere, Vahur; Moreno-Sanchez, Rafael; Käämbre, Tuuli Frontiers in oncology 2023 / art. 1171887, 11 p. : ill <https://doi.org/10.3389/fonc.2023.1171887> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The complexity of mitochondrial outer membrane permeability and VDAC regulation by associated proteins

Klepinin, Aleksandr; Ōunpuu, Ljudmila; Mädo, Kati; **Truu, Laura**; Tšekulajev, Vladimir; Puurand, Marju; Ševtšuk, Igor; Tepp, Kersti; Planken, Anu; Käämbre, Tuuli Journal of bioenergetics and biomembranes 2018 / p. 339-354 : ill <https://doi.org/10.1007/s10863-018-9765-9>

Different kinetics of the regulation of respiration in permeabilized cardiomyocytes and in HL-1 cardiac cells : importance of cell structure/organization for respiration regulation

Anmann, Tiia; Guzun, Rita; Beraud, Nathalie; Pelloux, Sophie; Kuznetsov, Andrey V.; **Kogerman, Lembi**; Käämbre, Tuuli; Sikk, Peeter; Paju, Kalju; Peet, Nadežda; Seppet, Enn; Ojeda, Carlos; Tourneur, Yves; Saks, Valdur Biochimica et biophysica acta 2006 / p. 1597-1606 : ill <https://www.sciencedirect.com/science/article/pii/S0005272806003070>

Energia, elu ja tervis : süsteemibioloogiast, bioenergeetikast ja biomeditsiinist

Käämbre, Tuuli; **Varikmaa, Minna** Horisont 2013 / lk. 16-23 : ill https://artiklid.elnet.ee/record=b2555949*est

Energy metabolic plasticity of colorectal cancer cells as a determinant of tumor growth and metastasis

Reinsalu, Leenu; Puurand, Marju; Tšekulajev, Vladimir; **Miller, Sten**; Ševtšuk, Igor; Tepp, Kersti; **Rebane-Klemm, Egle**; Timohhina, Natalja; Terasmaa, Anton; Käämbre, Tuuli Frontiers in Oncology 2021 / Art. nr. 698951 <https://doi.org/10.3389/fonc.2021.698951> [Journal metrics at Journal](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Energy Metabolism of Cancer: Unravelling Complexities Through Multiparameter Metabolic Analysis = Energia metabolism vähis: multiparametriline metaboolne analüüs

Miller, Sten 2025 https://www.ester.ee/record=b5747050*est <https://digikogu.taltech.ee/et/Item/a9603772-0df6-4da7-a018-55213b451759> <https://doi.org/10.23658/taltech.34/2025>

Energy Metabolism Profiling of Human Colorectal Tumours

Reinsalu, Leenu; **Miller, Sten**; **Auditano, Giuseppe Leonardo**; Puurand, Marju; Moreno-Sanchez, Rafael; Saavedra, Emma; Valvere, Vahur; Käämbre, Tuuli Journal of cellular and molecular medicine 2025 / art. e70462 : ill <https://doi.org/10.1111/jcmm.70462>

In situ monitoring of kinetics of metabolic conversion of ATP to ADP catalyzed by MgATPases of muscle Gastrocnemius skinned fibers using micellar electrokinetic chromatography

Kulp, Maria; **Kaljurand, Mihkel**; Käämbre, Tuuli; Sikk, Peeter; Saks, Valdur Electrophoresis 2004 / 17, p. 2996-3002 : ill <https://pubmed.ncbi.nlm.nih.gov/15349940/>

Influence of intrinsic and extrinsic factors on mitochondrial energy metabolism in the heart = Sisemiste ja väliste tegurite mõju südamelihase mitokondriaalsele energiametabolismile

Aid, Jekaterina 2024 <https://doi.org/10.23658/taltech.59/2024> https://www.ester.ee/record=b5703763*est <https://digikogu.taltech.ee/et/Item/c6a91cf8-7a69-42b2-bec5-18ac0105fad5>

Interplay between creatine kinase and adenylate kinase networks in health and disease = Kreatiinkinaasi ja adenülaatkinaasi energiaülekande võrgustike vaheline koosmõju normis ja patoloogias

Klepinin, Aleksandr 2018 <https://digi.lib.ttu.ee/i/?9963> https://www.ester.ee/record=b5141460*est

Investigation of interactions between mitochondrial creatine kinase and ATP/ADP channel

Karu-Varikmaa, Minna; **Metsis, Madis**; Guzun, Rita; Käämbre, Tuuli; Grichine, Alexei; Saks, Valdur FEBS journal 2011 / p. 374-375

A line-broadening free real-time 31P pure shift NMR method for phosphometabolomic analysis

Kaup, Karl Kristjan; **Toom, Lauri**; **Truu, Laura**; **Miller, Sten**; Puurand, Marju; Tepp, Kersti; Käämbre, Tuuli; Reile, Indrek Analyst 2021 / art. 7034, p. 5502–5507 : ill <https://doi.org/10.1039/d1an01198g>

Lipase-catalysed enantioselective hydrolysis : interpretation of the kinetic results in terms of frontier orbital localisation
Parve, Omar; **Vallikivi, Imre**; Metsala, Andrus; **Lille, Ülo**; Tõugu, Vello; Sikk, Peeter; **Käämbre, Tuuli**; Vija, Heiki; **Pehk, Tõnis**
Tetrahedron 1997 / 13, p. 4889-4900

Malignant transformation causes rearrangement of energy metabolism in colorectal and breast cancers = Kartsinogenees toob kaasa energiametabolismi ümberkorralduse jämesoole- ja rinnakasvajates
Koit, Andre 2018 <https://digi.lib.ttu.ee/i/?9349> https://www.ester.ee/record=b4761853*est

Metabolic alterations in colorectal polyps and their role in carcinogenesis = Metaboolsed muutused jämesoole polüüpides ja nende roll vähi tekkes
Rebane-Klemm, Egle 2023 <https://doi.org/10.23658/taltech.27/2023> <https://digikogu.taltech.ee/et/Item/40d31bd2-16a4-4b0a-8c2e-3f409997f857> https://www.ester.ee/record=b5569147*est

Metabolic remodeling of human colorectal cancer : alterations in energy fluxes = Soolevähi metaboolne remodelleerimine : muutused energiavoogudes
Kaldma, Andrus 2017 <https://digi.lib.ttu.ee/i/?7372> https://www.ester.ee/record=b4670813*est

Metabolic reprogramming accompanying the development of colorectal cancer = Kolorektaalvähi arenguga kaasnev metaboolne ümberprogrammeerimine
Reinsalu, Leenu 2024 https://www.ester.ee/record=b5708354*est <https://digikogu.taltech.ee/et/Item/127398f7-c150-42ac-bf23-f7d3ff34331f> <https://doi.org/10.23658/taltech.63/2024>

Mitochondria–cytoskeleton interaction : distribution of β -tubulins in cardiomyocytes and HL-1 cells
Guzun, Rita; Karu-Varikmaa, Minna; Gonzalez-Granillo, Marcela; Kuznetsov, Andrey V.; Michel, Laurianne; Cottet-Rousselle, Cecile; **Saaremäe, Merle**; Käämbre, Tuuli; **Metsis, Madis**; Grimm, Michael; Auffray, Charles; Saks, Valdur *Biochimica et biophysica acta* 2011 / p. 458-469 : ill <https://core.ac.uk/download/pdf/82551314.pdf>

Mitochondrial interactosome in energy metabolism in healthy and cancer cells
Gonzalez-Granillo, Marcela; Karu-Varikmaa, Minna; **Saaremäe, Merle**; Michel, Laurianne; Käämbre, Tuuli; Saks, Valdur; Guzun, Rita *Biophysical journal* 2011 / p. 298a-299a [https://www.cell.com/biophysj/fulltext/S0006-3495\(10\)03332-1](https://www.cell.com/biophysj/fulltext/S0006-3495(10)03332-1)

Mitochondrial respiration in human colorectal and breast cancer clinical material is regulated differently
Koit, Andre; Ševtšuk, Igor; Õunpuu, Ljudmila; Klepinin, Aleksandr; Tšekulajev, Vladimir; Timohhina, Natalja; Tepp, Kersti; Puurand, Marju; **Truu, Laura**; Heck, Karoliina; Valvere, Vahur; Guzun, Rita; Käämbre, Tuuli *Oxidative medicine and cellular longevity* 2017 / art. 1372640, 16 p. : ill <https://doi.org/10.1155/2017/1372640>

Mitochondrial respiration in KRAS and BRAF mutated colorectal tumors and polyps
Rebane-Klemm, Egle; **Truu, Laura**; **Reinsalu, Leenu**; Puurand, Marju; Ševtšuk, Igor; Tšekulajev, Vladimir; Timohhina, Natalja; Tepp, Kersti; Bogovskaja, Jelena; Afanasjev, Vladimir; Suurmaa, Külliki; Valvere, Vahur; Käämbre, Tuuli *Cancers* 2020 / art. 815 <https://doi.org/10.3390/cancers12040815> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Modeling of the coupled enzyme systems : model of mitochondrial creatine kinase (miCK) and adenine nucleotide translocase (ANT) coupling
Vendelin, Marko; **Anmann, Tiia**; Käämbre, Tuuli; Sikk, Peeter; Saks, Valdur *Biophysical Society meeting abstracts : Biophysical journal supplement* 2007 / p. 660A

Novel method for investigation of interactions between mitochondrial creatine kinase and adenine nucleotide translocase
Varikmaa, Minna; **Metsis, Madis**; Guzun, Rita; Käämbre, Tuuli; Grichine, Alexei; Saks, Valdur *Biophysical journal* 2010 / Iss. 3, Suppl. 1, p. 735a https://www.researchgate.net/publication/247278037_Novel_Method_for_Investigation_of_Interactions_between_Mitochondrial_Creatine_Kinase_and_Adenine_Nucleotide_Translocase

Rearrangement of energy metabolism during differentiation of cancer cells = Energiametabolismi ümberkorraldamine kasvajakude diferentseerimisel
Klepinina, Ljudmila 2021 https://www.ester.ee/record=b5431661*est <https://digikogu.taltech.ee/et/Item/3e83abfb-09c5-43ff-9a68-a44c5a5c9e9d> <https://doi.org/10.23658/taltech.24/2021>

Regulation of mitochondrial respiration by different tubulin isoforms in vivo
Karu-Varikmaa, Minna; **Saaremäe, Merle**; Sikk, Peeter; Käämbre, Tuuli; **Metsis, Madis**; Saks, Valdur *Biophysical journal* 2011 / p. 459a [https://www.cell.com/biophysj/fulltext/S0006-3495\(10\)04205-0](https://www.cell.com/biophysj/fulltext/S0006-3495(10)04205-0)

Smoking cessation only partially reverses cardiac metabolic and structural remodeling in mice
Aid, Jekaterina; Tanjeko, Ajime Tom; Serre, Jef; Eggelbusch, Moritz; Noort, Wendy; de Wit, Gerard M.J.; van Weeghel, Michel; Puurand, Marju; Tepp, Kersti; Gayan-Ramirez, Ghislaine; Degens, Hans; Käämbre, Tuuli; Wüst, Rob C.I. *Acta physiologica* 2024 / e14166 <https://doi.org/10.1111/apha.14145>

Study of possible interactions of tubulin, microtubular network, and STOP protein with mitochondria in muscle cells
Guerrero, Karen; Monge, Claire; Brückner, Anna; **Puurand, Ülo**; **Kadaja, Lumme**; Käämbre, Tuuli; **Seppet, Enn**; Saks, Valdur
Molecular and cellular biochemistry 2010 / 1/2, p. 239-249 : ill <https://pubmed.ncbi.nlm.nih.gov/19888554/>

The permeability of mitochondrial outer membrane and metabolic plasticity in colorectal cancer = Mitokondrite välismembraani läbitavus ja metaboolne plastilisus käärsoolevähis

Truu, Laura 2024 https://www.ester.ee/record=b5679407*est <https://digikogu.taltech.ee/et/Item/1c47ea05-9ec9-4a0b-a7c2-28e8a79afc1e>
<https://doi.org/10.23658/taltech.19/2024>

Wolframin deficiency is accompanied with metabolic inflexibility in rat striated muscles

Tepp, Kersti; **Aid-Vanakova, Jekaterina**; Puurand, Marju; Timohhina, Natalja; **Reinsalu, Leenu**; Tein, Karin; Plaas, Mario; Ševtšuk, Igor; Terasmaa, Anton; Käämbre, Tuuli Biochemistry and Biophysics Reports 2022 / art. 101250
<https://doi.org/10.1016/j.bbrep.2022.101250> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)