

The absence of active creatine kinase system influences cardiac calcium handling

Laasmaa, Martin; Branovets, Jelena; Karro, Niina; Birkedal Nielsen, Rikke; Vendelin, Marko Biophysical journal 2019 / Poster 484 ; p. 96a <https://doi.org/10.1016/j.bpj.2018.11.558>

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>

ADP protects cardiac mitochondria under severe oxidative stress

Sokolova, Niina; Pan, Shi; Provazza, Sarah; Beutner, Gisela; **Vendelin, Marko; Birkedal, Rikke**; Sheu, Shey-Shing PLoS ONE 2013 / art. e83214 <https://doi.org/10.1371/journal.pone.0083214> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

An in situ study of bioenergetic properties of human colorectal cancer: The regulation of mitochondrial respiration and distribution of flux control among the components of ATP synthasome

Kaldma, Andrus; Klepinin, Aleksandr; Chekulayev, Vladimir; Mado, Kati; Shevchuk, Igor; Timohhina, Natalja; Tepp, Kersti; Kandashvili, Manana; **Planken, Margus; Truu, Laura** International journal of biochemistry and cell biology 2014 / p. 171-186 : ill <https://doi.org/10.1016/j.biocel.2014.09.004> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Analysis of ADP compartmentation in cardiomyocytes and its role in protection against mitochondrial permeability transition pore opening = ADP kompartmentatsiooni analüüs südamelihaskududes ja selle roll mitokondriaalse suure läbitavusega poori avanemise eest kaitsmisel

Karro, Niina 2015 <https://digi.lib.ttu.ee/ii/?3423> https://www.ester.ee/record=b4500337*est

Author Correction: Comprehensive molecular characterization of mitochondrial genomes in human cancers (Nature Genetics, (2020), 52, 3, (342-352), 10.1038/s41588-019-0557-x)

Yuan, Yuan; Ju, Young Seok; Kim, Youngwook; Li, Jun; Wang, Yumeng; Yoon, Christopher J.; Yang, Yang; Martincorena, Inigo; Creighton, Chad J.; Weinstein, John N.; Xu, Yanxun; Han, Leng; **Uusküla-Reimand, Liis** Nature Genetics 2023 / p. 892 <https://doi.org/10.1038/s41588-020-0629-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Author Correction: Comprehensive molecular characterization of mitochondrial genomes in human cancers (Nature Genetics, (2020), 52, 3, (342-352), 10.1038/s41588-019-0557-x)

Yuan, Yuan; Ju, Young Seok; Kim, Youngwook; Li, Jun; Wang, Yumeng; Yoon, Christopher J.; Yang, Yang; Martincorena, Inigo; Creighton, Chad J.; Weinstein, John N.; Xu, Yanxun; Han, Leng; **Uusküla-Reimand, Liis** Nature Genetics 2023 / p. 1078 <https://doi.org/10.1038/s41588-023-01317-x> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Comparative analysis of some aspects of mitochondrial metabolism in differentiated and undifferentiated neuroblastoma cells

Klepinin, Aleksandr; **Kaldma, Andrus; Koit, Andre** Journal of bioenergetics and biomembranes 2014 / p. 17-31 : ill <https://doi.org/10.1007/s10863-013-9529-5> [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; Öunpuu, Ljudmila; Mado, 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; Tournier, Yves; Saks, Valdur Biochimica et biophysica acta 2006 / p. 1597-1606 : ill <https://www.sciencedirect.com/science/article/pii/S0005272806003070>

Elu alus. Energia ja energeetika

Palumaa, Peep Horisont 2012 / lk. 10-19 : ill https://artiklid.elnet.ee/record=b2467453*est

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](#)

Formation of [4Fe-4S] clusters in the mitochondrial iron-sulfur cluster assembly machinery

Brancaccio, Diego; **Zovo, Kairit; Palumaa, Peep** Journal of the American Chemical Society 2014 / p. 16240-16250 : ill <https://doi.org/10.1021/ja507822j> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Formation of highly organized intracellular structure and energy metabolism in cardiac muscle cells during postnatal development of rat heart

Anmann, Tiia; **Varikmaa, Minna**; Timohhina, Natalja; Tepp, Kersti; Shevchuk, Igor; Chekulayev, Vladimir; Saks, Valdur; Kaambre, Tuuli *Biochimica et biophysica acta - Bioenergetics* 2014 / p. 1350-1361 : ill <https://doi.org/10.1016/j.bbabo.2014.03.015> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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-bec5-18ac0105fadb>

Integrated and organized cellular bioenergetic systems in heart and brain

Anmann, Tiia 2007 http://www.ester.ee/record=b2281020*est

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

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>

Metallothionein 2A affects the cell respiration by suppressing the expression of mitochondrial protein cytochrome c oxidase subunit II

Bragina, Olga; Gurjanova, Karina; Krištal, Jekaterina; Kulp, Maria; Karro, Niina; Tõugu, Vello; Palumaa, Peep *Journal of bioenergetics and biomembranes* 2015 / p. 209-216 : ill <https://doi.org/10.1007/s10863-015-9609-9> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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 copper(I) transfer from Cox17 to Sco1 is coupled to electron transfer

Banci, Lucia; Bertini, Ivano; Ciofi-Baffoni, Simone; Hadjiloi, Theodoros; Martinelli, Manuele; **Palumaa, Peep** *PNAS* 2008 / 19, p. 6803-6808 : ill <https://pubmed.ncbi.nlm.nih.gov/18458339/>

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

Molecular dynamics simulations of creatine kinase and adenine nucleotide translocase in mitochondrial membrane patch

Karo, Jaanus; **Peterson, Pearu**; **Vendelin, Marko** *The journal of biological chemistry* 2012 / p. 7467-7476 : ill
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3293576/>

Molecular mechanism of mitoquinol mesylate in mitigating the progression of hepatocellular carcinoma - in silico and in

vivo studies

Sulaimon, Lateef Adegboyega; Adisa, Rahmat Adetutu; Samuel, Titilola Aderonke; Joel, Ireoluwa Yinka; **Ayankojo, Akinrinade George**; Abdulkareem, Fatimah Biade; Olaniyi, Timothy Olajire Journal of Cellular Biochemistry 2021 / p. 1157-1172
<https://doi.org/10.1002/jcb.29937> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Molecular system bioenergetics of cardiac cells : quantitative analysis of structure-function relationship
Tepp, Kersti 2011

Number of open mitochondrial voltage-dependent anion channels and intracellular diffusion coefficient in heart muscle
Simson, Päivo; Jephina, Natalja; Laasmaa, Martin; Branovets, Jelena; Peterson, Pearu; Birkedal Nielsen, Rikke; Vendelin, Marko Biophysical journal 2016 / p. 475a <https://doi.org/10.1016/j.bpj.2015.11.2540>

Pharmacological significance of MitoQ in ameliorating mitochondria-related diseases

Sulaimon, Lateef Adegboyega; Afolabi, Lukman Olalekan; Adisa, Rahmat Adetutu; **Ayankojo, Akinrinade George**; Afolabi, Mariam Olanrewaju; Adewolu, Abiodun Mohammed; Wan, Xiaochun Advances in Redox Research 2022 / art. 100037
<https://doi.org/10.1016/j.arres.2022.100037>

Regulation of mitochondrial respiration by different tubulin isoforms in vivo

Karu-Varikmaa, Minna; **Saaremaa, 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)

Restricted ADP movement in cardiomyocytes : cytosolic diffusion obstacles are complemented with a small number of open mitochondrial voltage-dependent anion channels

Simson, Päivo; Jephina, Natalja; Laasmaa, Martin; Peterson, Pearu; Birkedal Nielsen, Rikke; Vendelin, Marko Journal of molecular and cellular cardiology 2016 / p. 197-203 : ill <https://doi.org/10.1016/j.yjmcc.2016.04.012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Role of mitochondria-cytoskeleton interactions in respiration regulation and mitochondrial organization in striated muscles

Varikmaa, Minna; Bagur, Rafaela; Kaambre, Tuuli; Grichine, Alexei; Timohhina, Natalja; Tepp, Kersti; Shevchuk, Igor; Chekulayev, Vladimir; **Metsis, Madis**; Boucher, François Biochimica et biophysica acta - Bioenergetics 2014 / p. 232-245 : ill
<https://doi.org/10.1016/j.bbabo.2013.10.011> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Structural and functional studies of mitochondrial respiration regulation in muscle cells = Lihasrakkude mitokondriaalse hingamise regulatsiooni struktuursed ja funktsionaalsed uuringud

Varikmaa, Minna; Saks, Valdur; **Metsis, Madis** 2013 https://www.ester.ee/record=b3035829*est

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 location of energetic compartments affects energetic communication in cardiomyocytes

Birkedal, Rikke; Laasmaa, Martin; Vendelin, Marko Frontiers in physiology 2014 / art. 376, 9 p.: ill
<https://doi.org/10.3389/fphys.2014.00376> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

The maintenance of high ATP/ADP level in thermally degraded mitochondria by the 16,16-dimethyl-15-keto PGB1 trimer

Martin, Ivar; Männik, Erik; **Lille, Ülo** Eesti Teaduste Akadeemia Toimetised. Keemia 1990 / 1, lk. 57-59: ill

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>

The role of the mitochondrial outer membrane in in vivo regulation of respiration in normal heart and skeletal muscle cells = Étude du contrôle de la respiration mitochondriale des cellules musculaires - rôle de la membrane externe

Tiivel, Toomas 2002 https://www.ester.ee/record=b1655726*est

The role of tubulin in the mitochondrial metabolism and arrangement in muscle cells

Tepp, Kersti; Mado, Kati; **Varikmaa, Minna**; Klepinin, Aleksandr; Timohhina, Natalja; Shevchuk, Igor; Chekulayev, Vladimir; Kuznetsov, Andrey V.; Guzun, Rita; Kaambre, Tuuli Journal of bioenergetics and biomembranes 2014 / p. 421-434 : ill
<https://doi.org/10.1007/s10863-014-9579-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Unchanged mitochondrial organization and compartmentation of high-energy phosphates in creatine-deficient GAMT(-/-) mouse hearts

Branovets, Jelena; Sepp, Mervi; Kotlyarova, Svetlana; Jephina, Natalja; Sokolova, Niina; Aksentijevic, Dunja; Neubauer, Stefan; Lygate, Craig A.; **Vendelin, Marko**; **Birkedal Nielsen, Rikke** American journal of physiology - heart and circulatory

physiology 2013 / p. H506-H520 : ill <https://doi.org/10.1152/ajpheart.00919.2012> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

Химический синтез и влияние олигомеров 16, 16-диметил-15-кето аналога простагландина В1 на окислительное фосфорилирование в митохондриях : автореферат ... кандидата химических наук (02.00.03)

Martin, Ivar 1991 https://www.ester.ee/record=b1205941*est