

### Publications 2020

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Mohammadzadeh N, Melleby AO, Palmero S, Sjaastad I, Chakravarti S, Engebretsen KVT, Christensen G, Lunde IG, Tønnessen T. Moderate Loss of the Extracellular Matrix Proteoglycan Lumican Attenuates Cardiac Fibrosis in Mice Subjected to Pressure Overload. (2020) *Cardiology*, 145:187-198. PMID: 31968347.

Tazmini K, Frisk M, Lewalle A, Laasmaa M, Morotti S, Lipsett DB, Manfra O, Skogestad J, Aronsen JM, Sejersted OM, Sjaastad I, Edwards AG, Grandi E, Niederer SA, Øie E, Louch WE. Hypokalemia Promotes Arrhythmia by Distinct Mechanisms in Atrial and Ventricular Myocytes (2020) *Circ Res*, 126:889-906. PMID: 32070187.

Herum KM, Romaine A, Wang A, Melleby AO, Strand ME, Pacheco J, Braathen B, Dunér P, Tønnessen T, Lunde IG, Sjaastad I, Brakebusch C, McCulloch AD, Gomez MF, Carlson CR, Christensen G. Syndecan-4 Protects the Heart From the Profibrotic Effects of Thrombin-Cleaved Osteopontin (2020) *Am Heart Assoc*, 9:e013518. PMID: 32000579.

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### Publications 2021

Danielsen TK, Sadredini M, Manotheepan R, Aronsen JM, Frisk M, Hansen MH, Andressen KW, Hougen K, Levy FO, Louch WE, Sejersted OM, Sjaastad I, Stokke MK (2021)  
Exercise Training Stabilizes RyR2-Dependent Ca<sup>2+</sup> Release in Post-infarction Heart Failure  
*Front Cardiovasc Med*, 7, 623922  
PubMed [33569394](https://pubmed.ncbi.nlm.nih.gov/33569394/).

Frisk M, Le C, Shen X, Røe ÅT, Hou Y, Manfra O, Silva GJJ, van Hout I, Norden ES, Aronsen JM, Laasmaa M, Espe EKS, Zouein FA, Lambert RR, Dahl CP, Sjaastad I, Lunde IG, Coffey S, Cataliotti A, Gullestad L, Tønnessen T, Jones PP, Altara R, Louch WE (2021). Etiology-Dependent Impairment of Diastolic Cardiomyocyte Calcium Homeostasis in Heart Failure With Preserved Ejection Fraction. *J Am Coll Cardiol*, 77 (4), 405-419  
PubMed [33509397](https://pubmed.ncbi.nlm.nih.gov/33509397/)

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CaMKII inhibition has dual effects on spontaneous Ca<sup>2+</sup> release and Ca<sup>2+</sup> alternans in ventricular cardiomyocytes from mice with a gain-of-function RyR2 mutation  
*Am J Physiol Heart Circ Physiol*, 321 (2), H446-H460  
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Sadredini M, Manotheepan R, Lehnart SE, Anderson ME, Sjaastad I, Stokke MK (2021)  
The oxidation-resistant CaMKII-MM281/282VV mutation does not prevent arrhythmias in CPVT1  
*Physiol Rep*, 9 (18), e15030  
PubMed [34558218](#)

Setterberg IE, Le C, Frisk M, Li J, Louch WE (2021)  
The Physiology and Pathophysiology of T-Tubules in the Heart  
*Front Physiol*, 12, 718404  
PubMed [34566684](#)

Kobirumaki-Shimozawa F, Shimozawa T, Oyama K, Baba S, Li J, Nakanishi T, Terui T, Louch WE, Ishiwata S, Fukuda N (2021)  
Synchrony of sarcomeric movement regulates left ventricular pump function in the in vivo beating mouse heart  
*J Gen Physiol*, 153 (11)  
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Edwards AG, Mørk H, Stokke MK, Lipsett DB, Sjaastad I, Richard S, Sejersted OM, Louch WE (2021)  
Sarcoplasmic Reticulum Calcium Release Is Required for Arrhythmogenesis in the Mouse  
*Front Physiol*, 12, 744730  
PubMed [34712150](#)

Röhner E, Witman N, Sohlmer J, De Genst E, Louch WE, Sahara M, and Chien KR.

An mRNA Assay System Reveals Accelerated Proteasomal Degradation Pathway leads to Cardiomyopathic Phospholamban Null Mutation (2021) *Mol Med*, 27:102.

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## **Publications 2022**

Carlson CR, Aronsen JM, Bergan-Dahl A, Moutty MC, Lunde M, Lunde PK, Jarstadmarken H, Wanichawan P, Pereira L, Kolstad TRS, Dalhus B, Subramanian H, Hille S, Christensen G, Müller OJ, Nikolaev V, Bers DM, Sjaastad I, Shen X, Louch WE,

Klussmann E, Sejersted OM (2022). AKAP18 $\delta$  Anchors and Regulates CaMKII Activity at Phospholamban-SERCA2 and RYR  
Circ Res, 130 (1), 27-44  
PubMed [34814703](#)

Louch WE, Perdreau-Dahl H, Edwards AG (2022)  
Image-Driven Modeling of Nanoscopic Cardiac Function: Where Have We Come From, and Where Are We Going?  
Front Physiol, 13, 834211  
PubMed [35356084](#)

Romaine A, Melleby AO, Alam J, Lobert VH, Lu N, Lockwood FE, Hasic A, Lunde IG, Sjaastad I, Stenmark H, Herum KM,  
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Am J Physiol Heart Circ Physiol, 322 (6), H1057-H1071  
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Shen X, van den Brink J, Bergan-Dahl A, Kolstad TR, Norden ES, Hou Y, Laasmaa M, Aguilar-Sanchez Y, Quick AP, Espe EKS,  
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Kavaliauskiene S, Becker V, Sun B, Dalum AS, Vindas MA, Lund H, Johansen IB, Frisk, M (2022).

L-plastin levels are associated with mortality during cardiomyopathy syndrome in farmed Atlantic salmon (*Salmo salar*  
L.). *Aquaculture*. doi: [10.1016/j.aquaculture.2022.738546](#)

De Genst E, Foo KS, Xiao Y, Rohner E, De Vries E, Sohmér J, Witman N, Hidalgo A, Kolstad TRS, Louch WE, Pehrsson S, Park A,  
Ikeda Y, Wickson K, Jennbacken K, Hansson K, Fritsche Danielson R, Hunt J, and Chien KR. Blocking phospholamban with  
VHH intrabodies enhances contractility and relaxation in heart failure (2022) Nat Commun, 13:3018.

PubMed [35641497](#)

Sommese LM, Racioppi MF, Shen X, Orłowski A, Valverde C, Louch WE, Vila Petroff M, and Gonano LA.

Discordant Ca<sup>2+</sup> release in cardiac myocytes: characterization and susceptibility to pharmacological RyR2 modulation (2022)  
Pflugers Archiv; 474:625-636.

PubMed [35235009](#)

Frisk M, Norseng PA, Espe E, and Louch WE. Tubulator: An automated approach to analysis of t-tubule and dyadic  
organization in cardiomyocytes (2022) Philos Trans B, 21;377(1864):20210468. doi: 10.1098/rstb.2021.0468.  
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Støle TP, Lunde M, Shen X, Martinsen M, Lunde PK, Li J, Lockwood F, Sjaastad I, Louch WE, Aronsen JM, Christensen G and  
Carlson CR. The Female Syndecan-4<sup>-/-</sup> Heart has Smaller Cardiomyocytes, Augmented Insulin/pSer473-Akt/pSer9-GSK-3 $\beta$   
Signaling, and Lowered SCOP, pThr308-Akt/Akt and GLUT4 Levels (2022) Front Cell Devel Biol, in press.