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Pathobiological Sciences  
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## Short presentation

My research interests are centered on neurodegenerative and neurodevelopmental diseases. In my group we are implementing induced pluripotent cells (iPSC) from humans and animals to understand disease mechanisms leading to neurodegenerative and neurodevelopmental diseases.

The research on human iPSC models for neurodegenerative diseases encompasses Alzheimer's disease (AD), Frontotemporal dementia (FTD) and Glaucoma. Furthermore, we are working with canine iPSC to understand commonalities and divergences between human AD and canine cognitive dysfunction (CCD) also known as dog dementia. Our research on neurodevelopmental disorders is focused on implementing human iPSC models for epilepsy and schizophrenia.

Additionally, besides the canine iPSC, we are working with porcine and monkey iPSC. The establishment of these in vitro iPSC models is aimed in combination with organoid models at replacing and refining the need for in vivo animal models. Current funding sources:

Danish Research Council (FNU); Novo Nordisk Foundation; Lundbeck Foundation, Velux Foundation, Hørslev Foundation

## Employment

### Professor

Pathobiological Sciences

Frederiksberg C

20 May 2016 → nu

### Assistant Project Scientist

University of California at Irvine

Irvine, United States

1 Jan 2009 → 31 Dec 2011

### Postdoctoral Fellow

University of California at Irvine

Irvine, United States

15 Feb 2006 → 31 Dec 2008

### Visiting Guest Researcher

Lunds University

Sweden

26 Dec 1011 → 24 May 1012

## Research outputs

### Generation of two patient specific GABRD variants and their isogenic controls for modeling epilepsy

Kamand, M., Taleb, R., Wathikhinnakon, Methi, Mohamed, Fadumo Abdullahi, Ghanzanfari, S. P., Konstantinov, D., Hald, Jonas Laugård, Holst, B., Andersen, C. B., Møller, R. S., Lemke, J. R., Krey, I., Freude, Kristine & Chandrasekaran, Abinaya, 1 Apr 2024, In: Stem Cell Research. 76

### APOE4 IS INSTRUMENTAL IN AUGMENTING RHOA KINASE PHOSPHORYLATION AND CONTRIBUTES THEREBY TO CLASSICAL ALZHEIMER'S DISEASE NEURON PHENOTYPES

Freude, Kristine, Dittlau, Katarina Stoklund & Tao, Ruixin, 5 Mar 2024.

### **Astrocytes: The Stars in Neurodegeneration?**

Dittlau, Katarina Stoklund & Freude, Kristine, 28 Feb 2024, In: Biomolecules.

### **Implications of SNP-triggered miRNA dysregulation in Schizophrenia development**

Mohamed, Fadumo Abdullahi & Freude, Kristine, 26 Jan 2024, In: Frontiers in Genetics.

### **USP30 inhibition induces mitophagy and reduces oxidative stress in parkin-deficient human neurons**

Okarmus, J., Agergaard, J. B., Stummann, T., Haukedal, H., Ambjørn, M., Freude, Kristine, Fog, K. & Meyer, M., 14 Jan 2024, In: Nature.

### **Fordele og ulemper ved anvendelse af autologe versus allogene stamceller til behandling af artrose**

Bagge, J., Freude, Kristine, Lindegaard, Casper, Holst, B. & Hölmich, Per, 2024, In: Ugeskrift for Laeger. 186, 7 p., V06230423.

### **Generation of Human Induced Pluripotent Stem Cell (hiPSC)-Derived Astrocytes for Amyotrophic Lateral Sclerosis and Other Neurodegenerative Disease Studies**

Dittlau, Katarina Stoklund, Chandrasekaran, Abinaya, Freude, Kristine & Van Den Bosch, L., 2024, In: Bio-protocol. 14, 4, 16 p., e4936.

### **Generation of three isogenic gene-edited Huntington's disease human embryonic stem cell lines with DOX-inducible *NGN2* expression cassette in the *AAVS1* safe locus**

Duque Villegas, Luisana Carolina, Chandrasekaran, Abinaya, Flintholm Andersen, S. A., Nørremølle, Anne, Schmid, B., Pouladi, M. A. & Freude, Kristine, 2024, In: Stem Cell Research. 77, 6 p., 103408.

### **Increased glucose metabolism and impaired glutamate transport in human astrocytes are potential early triggers of abnormal extracellular glutamate accumulation in hiPSC-derived models of Alzheimer's disease**

Salcedo, C., Pozo Garcia, V., Garcia-Adan, B., Ameen, Aisha, Gegelashvili, G., Waagepetersen, Helle S., Freude, Kristine & Aldana, Blanca, 2024, (E-pub ahead of print) In: Journal of Neurochemistry.

### **The Nav1.5 variant G213D found in patients with MEPPC is associated with increased window current and gating pore current**

Magnusson, H. B. D., Geryk, M., Cordeiro, J. M., Lind, J. U., Jensen, H. K., Freude, Kristine & Callø, Kirstine, 16 Sep 2023

### **Challenges in Establishing Animal Induced Pluripotent Stem Cells**

Enevoldsen, Sara, Magnusson, H. B. D., Lind, J. U., Freude, Kristine & Callø, Kirstine, 15 Sep 2023.

### **Complexity of Sex Differences and Their Impact on Alzheimer's Disease**

Kadlecová, Marion, Freude, Kristine & Haukedal, H., 24 Apr 2023, In: Biomedicine. 11, 5, 29 p., 1261.

### **3D-organization and spatial localization of chromatin and epigenetic marks in relation to nucleolar activity in porcine oocytes**

Fenner, Merle Friederike, Benc, M., Rosenbaum Bartkova, A., Pihl, M., Chebrou, M., Freude, Kristine, Strejeck, F., Hyttel, P., Lucas-Hahn, A., Laurincik, J. & Bonnet-Garnier, A., 2023. 1 p.

### ***FUS*-ALS hiPSC-derived astrocytes impair human motor units through both gain-of-toxicity and loss-of-support mechanisms**

Dittlau, Katarina Stoklund, Terrie, L., Baatsen, P., Kerstens, A., De Swert, L., Janky, R., Corthout, N., Masrori, P., Van Damme, P., Hyttel, P., Meyer, M., Thorrez, L., Freude, Kristine & Van Den Bosch, L., 2023, In: Molecular Neurodegeneration. 18, 1, 5.

### **Alteration of microglial metabolism and inflammatory profile contributes to neurotoxicity in a hiPSC-derived microglia model of frontotemporal dementia 3**

Haukedal, H., Syshøj Lorenzen, S., Westi, Emil Winther, Corsi, G., Gadekar, V. P., McQuade, A., Davtyan, H., Doncheva, Nadezhda Tsankova, Schmid, B., Chandrasekaran, Abinaya, Seemann, Ernst Stefan, Cirera, Susanna, Blurton-Jones, M.

, Meyer, M., Gorodkin, Jan, Aldana, Blanca & Freude, Kristine, 2023, In: Brain, Behavior, and Immunity. 113, p. 353-373

**Chromatin organization, spatial localization of heterochromatin sequences and nucleolar activity, change towards final maturation in porcine oocytes**

Bonnet-Garnier, A., Benc, M., Bartkova, A., Pihl, M., Chebrou, M., Strejcek, F., Hyttel, P., Lucas-Hahn, A., Laurincik, J., Freude, Kristine & Fenner, Merle Friederike, 2023. 1 p.

**Generation of eight hiPSCs lines from two pathogenic variants in CACNA1A using the CRISPR-Cas9 gene editing technology**

Rivera-Sánchez, P., Søndergaard, L., Wathikthinnakon, Methi, B. D. Magnusson, H., Frederiksen, Henriette Reventlow S, Aabæk Hammer, F., Taleb, R., Christian Cassidy, C., Tranholm Bruun, M., Tümer, Asuman Zeynep, Holst, B., Brasch-Andersen, C., Møller, R., Freude, Kristine & Chandrasekaran, Abinaya, 2023, In: Stem Cell Research. 71, 103193.

**Golgi fragmentation: One of the earliest organelle phenotypes in Alzheimer's disease neurons**

Haukedal, H., Corsi, G. I., Gadekar, V. P., Doncheva, N. T., Kedia, S., de Haan, N., Chandrasekaran, A., Jensen, P., Schiønning, P., Vallin, S., Marlet, F. R., Poon, A., Pires, C., Agha, F. K., Wandall, H. H., Cirera, S., Simonsen, A. H., Nielsen, T. T., Nielsen, J. E., Hyttel, P. & 7 others, Muddashetty, R., Aldana, Blanca, Gorodkin, Jan, Nair, D., Meyer, M., Larsen, M. R. & Freude, Kristine, 2023, In: Frontiers in Neuroscience. 17, 17 p., 1120086.

**Potential Retinal Biomarkers in Alzheimer's Disease**

Garcia Bermudez, Mariana Yolotzin, Vohra, Rupali, Freude, Kristine, van Wijngaarden, P., Martin, K. K., Thomsen, M. S., Aldana, Blanca & Kolko, Miriam, 2023, In: International Journal of Molecular Sciences (Online). 24, 21, 26 p., 15834.

**Role of S1P-receptor and Rho-kinase in myogenic tone in mesenteric and cerebral arteries of young vs. middle-aged mice**

Skovsted, Gry Freja, Aupetit, A., Björling, K., Haanes, K. A., Syberg, S., Jørgensen, N. R., Freude, Kristine, Pearson, J. T. & Jensen, Lars Jørn, 2023, In: Acta Physiologica. 239, S728, e14042.

**The transcriptomic landscape of neurons carrying PSEN1 mutations reveals changes in extracellular matrix components and non-coding gene expression**

Corsi, G. I., Gadekar, V. P., Haukedal, H., Doncheva, Nadezhda Tsankova, Anthon, Christian, Ambardar, S., Palakodeti, D., Hyttel, P., Freude, Kristine, Seemann, Ernst Stefan & Gorodkin, Jan, 2023, In: Neurobiology of Disease. 178, 17 p., 105980.

**Decreased Glucose Metabolism and Glutamine Synthesis in the Retina of a Transgenic Mouse Model of Alzheimer's Disease**

Tams, A. L. M., Sanz-Morello, B., Westi, Emil Winther, Mouhammad, Zaynab Ahmad, Andersen, Jens Velde, Freude, Kristine, Vohra, Rupali, Hannibal, Jens, Aldana, Blanca & Kolko, Miriam, 2022, In: Cellular and Molecular Neurobiology. 42, 1, p. 291-303

**Editorial: Metabolic Alterations in Neurodegenerative Disorders**

Freude, Kristine, Moreno-gonzalez, I., Rodriguez-ortiz, C. J. & Baglietto-vargas, D., 2022, In: Frontiers in Aging Neuroscience. 14, 3 p., 833109.

**Fats, Friends or Foes: Investigating the Role of Short- and Medium-Chain Fatty Acids in Alzheimer's Disease**

Ameen, Aisha, Freude, Kristine & Aldana, Blanca, 2022, In: Biomedicines. 10, 11, 2778.

**Generic benzalkonium chloride-preserved travoprost eye drops are not identical to the branded polyquarternium-1-preserved travoprost eye drop: Effect on cultured human conjunctival goblet cells and their physicochemical properties**

Nagstrup, Anne Hedengran, Freiberg, Josefine, Hansen, Pernille May, Jacobsen, Jette, Larsen, Susan Weng, Rønholdt, Stine, Freude, Kristine, Boix-lemonche, G., Petrovski, G., Heegaard, Steffen & Kolko, Miriam, 2022, In: Acta Ophthalmologica. 100, 7, p. 819-827

**Prevention of Cell Death by Activation of Hydroxycarboxylic Acid Receptor 1 (GPR81) in Retinal Explants**

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### **RhoA Signaling in Neurodegenerative Diseases**

Schmidt, S. I., Blaabjerg, M., Freude, Kristine & Meyer, M., 2022, In: *Cells*. 11, 9, 1520.

### **The G213D variant in Nav1.5 alters sodium current and causes an arrhythmogenic phenotype resulting in a multifocal ectopic Purkinje-related premature contraction phenotype in human-induced pluripotent stem cell-derived cardiomyocytes**

Callø, Kirstine, Geryk, M., Freude, Kristine, Treat, J. A., Vold, V. A., Frederiksen, Henriette Reventlow S, Broendberg, A. K., Frederiksen, T. C., Jensen, H. K. & Cordeiro, J. M., 2022, In: *Europace : European pacing, arrhythmias, and cardiac electrophysiology : journal of the working groups on cardiac pacing, arrhythmias, and cardiac cellular electrophysiology of the European Society of Cardiology*. 24, 12, p. 2015–2027

### **A protein-centric view of in vitro biological model systems for schizophrenia**

Chandrasekaran, Abinaya, Jensen, P., Mohamed, Fadumo Abdullahi, Lancaster, M., Benros, Michael Eriksen, Larsen, M. R. & Freude, Kristine, 2021, In: *Stem Cells*. 39, 12, p. 1569-1578

### **APOE4 affects basal and NMDAR mediated protein synthesis in neurons by perturbing calcium homeostasis**

Ramakrishna, S., Jhaveri, V., Konings, S. C., Nawalpur, B., Chakraborty, S., Holst, B., Schmid, B., Gouras, G. K., Freude, Kristine & Muddashetty, R. S., 2021, In: *The Journal of neuroscience : the official journal of the Society for Neuroscience*. 41, 42, p. 8686-8709

### **Astrocytic reactivity triggered by defective autophagy and metabolic failure causes neurotoxicity in frontotemporal dementia type 3**

Chandrasekaran, A., Dittlau, K. S., Corsi, G. I., Haukedal, H., Doncheva, N. T., Ramakrishna, S., Ambardar, S., Salcedo, C., Schmidt, S. I., Zhang, Y., Cirera, S., Pihl, M., Schmid, B., Nielsen, T. T., Nielsen, J. E., Kolko, M., Kobolák, J., Dinnyés, A., Hyttel, P., Palakodeti, D. & 5 others, Gorodkin, Jan, Muddashetty, R. S., Meyer, M., Aldana, Blanca & Freude, Kristine, 2021, In: *Stem Cell Reports*. 16, 11, p. 2736-2751

### **Cellular bioenergetics in human iPSC-derived glutamatergic neurons in health and disease**

Aldana, Blanca, Salcedo, C., Freude, Kristine & Waagepetersen, Helle S., 2021, *Current Progress in iPSC-derived Cell Types*. Birbrair, A. (ed.). Elsevier, p. 205-221 17 p. (Advances in Stem Cell Biology, Vol. 10).

### **Downregulation of GABA Transporter 3 (GAT3) is Associated with Deficient Oxidative GABA Metabolism in Human Induced Pluripotent Stem Cell-Derived Astrocytes in Alzheimer's Disease**

Salcedo, C., Wagner, A., Andersen, Jens Velde, Vinten, K. T., Waagepetersen, Helle S., Schousboe, Arne, Freude, Kristine & Aldana, Blanca, 2021, In: *Neurochemical Research*. 46, p. 2676–2686

### **Functional Metabolic Mapping Reveals Highly Active Branched-Chain Amino Acid Metabolism in Human Astrocytes, Which Is Impaired in iPSC-Derived Astrocytes in Alzheimer's Disease**

Salcedo, C., Andersen, Jens Velde, Vinten, K. T., Pinborg, Lars Hageman, Waagepetersen, Helle S., Freude, Kristine & Aldana, Blanca, 2021, In: *Frontiers in Aging Neuroscience*. 13, 736580.

### **Glial Cells in Glaucoma: Friends, Foes, and Potential Therapeutic Targets**

Garcia Bermudez, Mariana Yolotzin, Freude, Kristine, Mouhammad, Zaynab Ahmad, van Wijngaarden, P., Martin, K. K. & Kolko, Miriam, 2021, In: *Frontiers in Neurology*. 12, 17 p., 624983.

### **Hippocampal disruptions of synaptic and astrocyte metabolism are primary events of early amyloid pathology in the 5xFAD mouse model of Alzheimer's disease**

Andersen, Jens Velde, Skotte, Niels Henning, Christensen, S. K., Polli, F. S., Shabani, M., Markussen, K. H., Haukedal, H., Westi, Emil Winther, Diaz-delCastillo, M., Sun, R. C., Kohlmeier, Kristi Anne, Schousboe, Arne, Gentry, M. S., Tanila, H., Freude, Kristine, Aldana, Blanca, Mann, Matthias & Waagepetersen, Helle S., 2021, In: *Cell Death & Disease*. 12, 11, 13 p., 954 .

### **Implications of Glycosylation in Alzheimer's Disease**

Haukedal, H. & Freude, Kristine, 2021, In: *Frontiers in Neuroscience*. 14, 18 p., 625348.

**Microglia-Secreted Factors Enhance Dopaminergic Differentiation of Tissue- and iPSC-Derived Human Neural Stem Cells**  
Schmidt, S. I., Bogetofte, H., Ritter, L., Agergaard, Jette Bach, Hammerich, D., Kabiljagic, A. A., Wlodarczyk, A., Lopez, S. G., Sørensen, M. D., Jørgensen, M. L., Okarmus, J., Serrano, A. M., Kristensen, Bjarne Winther, Freude, Kristine, Owens, T. & Meyer, M., 2021, In: Stem Cell Reports. 16, p. 1-14

**Neural Derivates of Canine Induced Pluripotent Stem Cells-Like Cells From a Mild Cognitive Impairment Dog**

Chandrasekaran, Abinaya, Thomsen, B. B., Agerholm, Jørgen Steen, Pessôa, L. V. D. F., Godoy Pieri, N. C., Sabaghidarmiyani, V., Langley, K., Kolko, Miriam, De Andrade, A. F. C., Bressan, F. F., Hyttel, P., Berendt, Mette & Freude, Kristine, 2021, In: Frontiers in Veterinary Science. 8, 14 p., 725386.

**Neuronal alpha-amylase is important for neuronal activity and glycogenolysis and reduces in presence of amyloid beta pathology**

Byman, E., Martinsson, I., Haukedal, H., Gouras, G., Freude, Kristine, Wennstrom, M. & Netherlands Brain Bank, N. B. B., 2021, In: Aging Cell. 20, 8, 14 p., 13433.

**Nicotinamide Adenine Dinucleotide Phosphate Oxidases Are Everywhere in Brain Disease, but Not in Huntington's Disease?**

Duque Villegas, Luisana Carolina, Nørremølle, Anne, Freude, Kristine & Vilhardt, Frederik, 2021, In: Frontiers in Aging Neuroscience. 13, 20 p., 736734.

**Non-immunogenic Induced Pluripotent Stem Cells, a Promising Way Forward for Allogenic Transplantations for Neurological Disorders**

Frederiksen, Henriette Reventlow S, Doehn, U., Tveden-Nyborg, Pernille & Freude, Kristine, 2021, In: Frontiers in Genome Editing. 2, 623717.

**Oxidative stress in optic neuropathies**

Sanz-Morello, B., Ahmadi, H., Vohra, Rupali, Saruhanian, S., Freude, Kristine, Hamann, Steffen & Kolko, Miriam, 2021, In: Antioxidants. 10, 10, 27 p., 1538.

**iPSC-derived Microglia for Disease Modeling of Frontotemporal Dementia 3**

Haukedal, H., Freude, Kristine, Garcia, B. A., Corsi, G., Gadekar, V. & Gorodkin, Jan, 2021, In: Glia. 69, S1, p. E480-E481 T14-066D.

**Patient iPSC-Derived Neurons for Disease Modeling of Familial Alzheimer's Disease with Mutations in Presenilin 1**

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**Canine induced pluripotent stem cells: an in vitro approach to validate the dog as a large animal model for Alzheimer's disease**

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**Enrichment of retinal ganglion and Müller glia progenitors from retinal organoids derived from human induced pluripotent stem cells - possibilities and current limitations**

Freude, Kristine, Saruhanian, S., Mccauley, A., Paterson, C., Odette, M., Oostenink, A., Hyttel, P., Gillies, M., Haukedal, H. & Kolko, Miriam, 2020, In: World Journal of Stem Cells. 12, 10, p. 1171-1183

**Generation of neural progenitor cells (NPC) from porcine induced pluripotent stem cells (piPSC)**

Machado, L. S., Pieri, N. C. G., Botigelli, R. C., de Castro, R. V. G., de Souza, A. F., Bridi, A., Lima, M. A., Fantinato Neto, P., de Figueiredo Pessôa, L. V., Martins, S. M. M. K., de Andrade, A. F. C., Freude, Kristine & Bressan, F. F., 2020, In: Journal of Tissue Engineering and Regenerative Medicine. 14, 12, p. 1880-1891

**Glutamate-glutamine homeostasis is perturbed in neurons and astrocytes derived from patient iPSC models of frontotemporal dementia**

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**Human induced pluripotent cells in personalized treatment of monogenic epilepsies**

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**Mutation in FTD3 CHMP2B causes impaired autophagy and distorted energy metabolism cumulating in reactive astrocyte phenotypes**

Chandrasekaran, A., Dittlau, K. S., Corsi, G., Haukedal, H., Doncheva, N. T., Ramakrishna, S., Ambardar, S., Salcedo, C., Schmidt, S. I., Cirera, S., Pihl, M., Schmid, B., Nielsen, T. T., Nielsen, J., Kolko, M., Kobolak, J., Dinnyes, A., Hyttel, P., Palakodeti, D., Gorodkin, J. & 4 others, Muddashetty, R., Meyer, M., Aldana, Blanca & Freude, Kristine, 2020.

**Mutations in FTD3 CHMP2B causes impaired autophagy and distorted energy metabolism cumulating in reactive astrocyte phenotypes**

Chandrasekaran, A., Dittlau, K. S., Corsi, G., Doncheva, N. T., Haukedal, H., Ramakrishna, S., Ambardar, S., Salcedo, C., Schmidt, S. I., Cirera, S., Pihl, M., Schmid, B., Nielsen, T. T., Nielsen, J., Kolko, M., Kobolak, J., Dinnyes, A., Hyttel, P., Palakodeti, D., Gorodkin, J. & 4 others, Muddashetty, R., Meyer, M., Aldana, Blanca & Freude, Kristine, 2020.

**Patient iPSC-Derived Neurons for Disease Modeling of Familial Alzheimer's Disease with Mutations in Presenilin 1**

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**Generation of two isogenic iPSC lines with either a heterozygous or a homozygous E280A mutation in the PSEN1 gene.**

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**Generation of two iPSC lines with either a heterozygous V717I or a heterozygous KM670/671NL mutation in the APP gene**

Frederiksen, Henriette Reventlow S, Holst, B., Ramakrishna, S., Muddashetty, R., Schmid, B. & Freude, Kristine, 1 Jan 2019, In: Stem Cell Research. 34, 5 p., 101368.

**Cell type specific expression of toll-like receptors in human brains and implications in Alzheimer's disease**

Frederiksen, Henriette Reventlow S, Haukedal, H. & Freude, Kristine, 2019, In: BioMed Research International. 2019, 18 p., 7420189.

**Dementia, Brain Disorders and Molecular Mechanisms**

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**Genetic protection modifications: Moving beyond the binary distinction between therapy and enhancement for human genome editing**

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**Implications of Microglia in Amyotrophic Lateral Sclerosis and Frontotemporal Dementia**

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**Induced pluripotent stem cells throughout the animal kingdom: Availability and applications**

Pessôa, L. V. D. F., Bressan, F. F. & Freude, Kristine, 2019, In: World Journal of Stem Cells. 11, 8, p. 491-505 15 p.

**Metabolic impairments in neurons and astrocytes derived from human induced pluripotent stem cells of Alzheimer's disease patients**

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**Modelling the neuropathology of lysosomal storage disorders through disease-specific human induced pluripotent stem cells**

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**Oocytes, embryos and pluripotent stem cells from a biomedical perspective**

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**Essential Roles of Lactate in Müller Cell Survival and Function**

Vohra, Rupali, Aldana, Blanca, Jensen, Dorte Skytt, Freude, Kristine, Waagepetersen, Helle S., Bergersen, L. H. & Kolko, Miriam, 1 Dec 2018, In: *Molecular Neurobiology*. 55, 12, p. 9108-9121 14 p.

**WebCircRNA: Classifying the Circular RNA Potential of Coding and Noncoding RNA.**

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**Generation of transgene-free porcine intermediate type induced pluripotent stem cells**

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**Induced pluripotent stem cells derived from Alzheimer's disease patients: the promise, the hope and the path ahead**

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Freude, Kristine, Penjwini, M., Davis, J. L., LaFerla, F. M. & Blurton-Jones, M., 2011, In: The Journal of Biological Chemistry. 286, 27, p. 24264-24274 11 p.

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**Nkx6-1 controls the identity and fate of red nucleus and oculomotor neurons in the mouse midbrain**

Prakash, N., Puellas, E., Freude, Kristine, Trümbach, D., Omodei, D., Di Salvio, M., Sussel, L., Ericson, J., Sander, M., Simeone, A. & Wurst, W., 2009, In: Development (Cambridge, England). 136, 15, p. 2545-2555 11 p.

**A dosage-dependent requirement for Sox9 in pancreatic endocrine cell formation**

Seymour, Philip Allan, Freude, Kristine, Dubois, C. L., Shih, H., Patel, N. A. & Sander, M., 1 Nov 2008, In: Advances in Developmental Biology. 323, 1, p. 19-30 12 p.

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Seymour, Philip Allan, Freude, Kristine, Tran, M. N., Mayes, E. E., Jensen, J., Kist, R., Scherer, G. & Sander, M., 6 Feb 2007, In: Proceedings of the National Academy of Sciences of the United States of America. 104, 6, p. 1865-70 6 p.

**X-linked mental retardation: a comprehensive molecular screen of 47 candidate genes from a 7.4 Mb interval in Xp11**

Jensen, L. R., Lenzner, S., Moser, B., Freude, Kristine, Tzschach, A., Wei, C., Fryns, J., Chelly, J., Turner, G., Moraine, C., Hamel, B., Ropers, H. & Kuss, A. W., 2007, In: European Journal of Human Genetics. 15, 1, p. 68-75 8 p.

**Mutations in the FTSJ1 gene coding for a novel S-adenosylmethionine-binding protein cause nonsyndromic X-linked mental retardation**

Freude, K., Hoffmann, K., Jensen, L., Delatycki, M. B., des Portes, V., Moser, B., Hamel, B., van Bokhoven, H., Moraine, C., Fryns, J., Chelly, J., Géczy, J., Lenzner, S., Kalscheuer, V. M., Ropers, H. & Freude, Kristine, Aug 2004, In: American Journal of Human Genetics. 75, 2, p. 305-9 5 p.

#### **Mutations in the polyglutamine binding protein 1 gene cause X-linked mental retardation**

Kalscheuer, V. M., Freude, K., Musante, L., Jensen, L. R., Yntema, H. G., Géczy, J., Sefiani, A., Hoffmann, K., Moser, B., Haas, S., Gurok, U., Haesler, S., Aranda, B., Nshedjan, A., Tzschach, A., Hartmann, N., Roloff, T.-C., Shoichet, S., Hagens, O., Tao, J. & 14 others, Van Bokhoven, H., Turner, G., Chelly, J., Moraine, C., Fryns, J., Nuber, U., Hoeltzenbein, M., Scharff, C., Scherthan, H., Lenzner, S., Hamel, B. C. J., Schweiger, S., Ropers, H. & Freude, Kristine, Dec 2003, In: Nature Genetics. 35, 4, p. 313-5 3 p.

## **Activities**

### **Microglia specific sex differences and their impact in Alzheimer's disease**

Freude, Kristine (Other)

8 May 2024

### **Application of CRISPR/Cas9 in modelling neurodegenerative diseases**

Freude, Kristine (Other)

2 May 2024

### **Deciphering the sex specific neuroinflammatory component in Alzheimer's disease**

Freude, Kristine (Other)

30 Apr 2024

### **SUND Neuroscience Event**

Freude, Kristine (Participant)

30 Apr 2024

### **Deciphering the sex specific neuroinflammatory component in Alzheimer's disease**

Freude, Kristine (Other)

4 Apr 2024

### **Trønderbrain Research Seminar 2024**

Freude, Kristine (Participant)

4 Apr 2024 → 5 Apr 2024

### **DEVELOPNOID Annual meeting 19th to 20th of March 2024**

Freude, Kristine (Participant) & Mohamed, Fadumo Abdullahi (Participant)

19 Mar 2024 → 20 Mar 2024

### **Gene editing**

Freude, Kristine (Other)

19 Mar 2024

### **(AD/PD 2024) INTERNATIONAL CONFERENCE ON ALZHEIMER'S AND PARKINSON'S DISEASES AND RELATED NEUROLOGICAL DISORDERS**

Freude, Kristine (Participant) & Tao, Ruixin (Participant)

5 Mar 2024 → 9 Mar 2024

### **Neuroimmunology Research Society Denmark (NIRS-DK) Conference 2024**

Freude, Kristine (Participant)

4 Mar 2024

## **iPSC Models to Decipher Glia Mediated Inflammatory Responses in Neurodegenerative Diseases**

Freude, Kristine (Other)

4 Mar 2024

## **Biology of Aging and lifestyle**

Jensen, Lars Jørn (Participant) & Freude, Kristine (Participant)

31 Mar 2022

## **Induced pluripotent stem cell models for neurodegenerative diseases**

Freude, Kristine (Other)

31 Mar 2022

## **Prizes**

### **Alzheimer Forskningsfonden Forskerpris**

Freude, Kristine (Recipient), 2020

## **Press/Media**

### **Kort Sagt: "The hope and the hype of stem cells" - by Kristine Freude**

Kristine Freude

10/03/2016

1 Media contribution

### **Medicin mod demens: Ingen ved, om kvinder får gavn af det**

Kristine Freude

01/06/2023

1 Media contribution

### **Minihjerner af stamceller skal løse Alzheimergåden**

Kristine Freude & Henriette Haukedal

23/10/2020

1 Media contribution

### **Musene med to fædre**

Kristine Freude

09/03/2023

1 Media contribution