

Curriculum Vitae: Dr. Simon Kaja

Contact details :

Simon Kaja, Ph.D.
University of Missouri Kansas City
School of Medicine
2411 Holmes St.
Kansas City, MO 64108

Tel: +1 (816) 235-6773
Fax: +1 (816) 235-6690
Cell: +1 (682) 234-4763
Email: kajas@umkc.edu

Current rank and position (since Feb 2009):

Assistant Professor, Departments of Ophthalmology and Basic Medical Science;
Associate Director Preclinical Research; Vision Research Center.
Adjunct Doctoral Faculty, University of Missouri – Kansas City

Research Interest:

Neuroprotective approaches for neurodegenerative diseases of the eye and brain; calcium signaling; Alzheimer's disease; dry-eye disease; stroke; cerebellar ataxia; calcium channelopathies; migraine.

Key methodological expertise:

Molecular biology, cell biology, biochemistry, patch-clamp electrophysiology, laboratory animals.

Research Support:

UMKC:

National Headache Foundation Research Grant 2010

04/01/2009-03/31/2010

“Novel mechanism underlying the visual impairments during migraine headaches.”

Role: Principal Investigator

Fight for Sight Grant-in-Aid

07/01/2010 – 06/30/2011

“Lacrimal gland dysfunction: a first step towards pharmacotherapy of dry-eye disease”

Role: Principal Investigator

PREVIOUS GRANT SUPPORT:

Completed:

ST-PDF-140(05-1)BM

07/01/2006 – 06/30/2008

Michael Smith Foundation for Health Science Research

“Functional characterization of low-voltage activated T-type calcium channels in cerebellar slices of wild-type and P/Q-type calcium channel mutant mice.”

Administrative and teaching duties (UMKC):

- Sarah Morrison Student Research Award, School of Medicine, Member of the Faculty Evaluation Committee
- Student Research Day, School of Medicine, Juror
- Associate Director Preclinical Research, UMKC School of Medicine, Vision Research Center
- Thesis committees (Interdisciplinary Ph.D. program, School of Biological Sciences)
- Instructor for course “Research in Ophthalmology”, School of Medicine
- Instructor for course “Research in Neuroscience”, School of Medicine

Current students (UMKC):

Michael A. Grillo	Committee member for interdisciplinary Ph.D. program in Biological Sciences
Neeti A. Desai	Basic Research Rotation; winner of Sarah Morrison Research Award
Ruby A. Parikh	Basic Research internship
Prasanthi Kandula	Basic Research internship
Maaz Iqbal	Basic Research Rotation
Grant Fischer	Basic Research internship supervisor (Rockhurst University)

Previous research positions:

01/2009 – 02/2009: Research Scientist
University of Missouri – Kansas City, School of Medicine, Kansas City, MO
Departments of Ophthalmology and Basic Medical Science;

10/2008 – 12/2008: Research Scientist
University of North Texas Health Science Center at Fort Worth, Fort Worth, TX
Department of Pharmacology and Neuroscience

07/2008 - 10/2008: Research Scientist
Neurosearch A/S, Ballerup, Denmark
Department of Behavioral Pharmacology II

2006-2008: Senior Research Associate
Laboratory Professor T.P. Snutch, Michael Smith Laboratories,
The University of British Columbia, Vancouver, BC, Canada

Education:

2002-2006: Doctor of Philosophy (Ph.D.)
Neuroscience
Faculty of Medicine, University of Leiden, Leiden, The Netherlands
Date of award: Feb 6, 2007

1998-2002: B.Sc. (Hons.) (Dunelm) with First Class Honours
Molecular Biology and Biochemistry with Industrial Placement,
School of Biological and Biomedical Sciences, University of Durham, Durham, UK

1996-1998: Abitur (German baccalaureate) with distinction
Städtisches Gymnasium Odenkirchen, Mönchengladbach, Germany
Majors: Biology, Chemistry, French, Geography, Ancient Greek

Awards, Prizes and Grants:

- Michael Smith Foundation for Health Research postdoctoral trainee award (2006-2008);
- European Molecular Biology Organization postdoctoral fellowship (2006-2008);
- RUBICON grant (Netherlands Organisation for Scientific Research);
- Ph.D. scholar of the German National Merit Foundation (2003-2006);
- British Neuroscience Association Undergraduate Award 2002/2003 for outstanding achievement in the field of Neuroscience;
- Neuroscience North East 2002, Sunderland, UK: Best oral presentation award
- Boulter Prize in Molecular Biology 2002, University of Durham;
- Scholar of the e-fellows.net Foundation (2001 – 2006);
- Undergraduate scholar of the German National Merit Foundation (1999-2002).

Professional Affiliations:

- Association for Research in Vision and Ophthalmology
- Biophysical Society
- Society for Neuroscience
- The Institute of Biology London
- Federation of European Neuroscience Societies
- International Brain Research Organization

Professional activities:

2008-present: Ad-hoc reviewer for *Brain Research*, *Neuroscience Letters*, *International Journal of Developmental Neuroscience*, *Eye and Brain*;

2006-2008: Ad-hoc consultant to the Pharmaceutical Industry in the Field of Cerebellar Ataxia

2004-present: Co-supervisor of undergraduate and graduate students

2004: “Young Researcher” participant in the “FUTUR – The German Research Dialogue” program by the German Federal Ministry of Education and Research (Activities included contributing to the identification of core-research areas to receive priority funding and suggesting strategic policy changes with regard to novel biotechnological developments.)

Collaborations:

- Professor Peter Koulen, University of Missouri- Kansas City; Kansas City, MO;
- Professor Ann Smith, University of Missouri- Kansas City; Kansas City, MO;
- Professor Nilofer Qureshi, University of Missouri- Kansas City; Kansas City, MO;
- Professor T. P. Snutch, University of British Columbia; Vancouver, B.C.;
- Professor D. Pietrobon, University of Padova, Padova, Italy;
- Dr. N.R. Mirza, NeuroSearch A/S, Ballerup, Denmark;
- Dr. D. Parker, Neuromed Pharmaceuticals Inc., Vancouver, B.C.;
- Dr. Ricardo Felix, University of Mexico, Mexico City, Mexico.

Supervisory and teaching experience:

- Supervisor of Masters and Ph.D. students at UMKC;
- Supervision of technical staff (Novo Nordisk A/S; NeuroSearch A/S),
- Supervision of summer and project students (University of Durham, Leiden University Medical Centre, The University of British Columbia; UNT Health Science Center).
- Supervision of graduate students (shared with PI) at Leiden University Medical Centre.
- Teaching Introductory Neurophysiology at several summer universities of the German National Merit Foundation

Research and training projects:

• 07/2008 – 10/2008:

NeuroSearch A/S, Ballerup, Denmark

Dept. of Behavioral Pharmacology II

Target and model development for cerebellar ataxias; academic project: Characterization of GABAergic transmission in animal models for migraine and cerebellar ataxia.

• 2006 – 2008: Postdoc toral project

The University of British Columbia, Vancouver, B.C., Canada

Michael Smith Laboratories, Departments of Zoology and Psychiatry

Supervisor: Professor Terrance P. Snutch

Elucidation of disease pathways in genetically sensitized animal models for migraine.

Techniques: Patch-clamp electrophysiology (heterologous expression systems, primary neuronal cell culture); expression studies (qPCR/Taqman®); cell/molecular biology; coordination of rodent breeding program and animal care applications.

• 2002 – 2006: Ph.D. project

Leiden University Medical Centre, Leiden, The Netherlands

Dept. of Neurology and Group Neurophysiology, Department of Molecular Cell Biology

Supervisors: Dr. Jaap J Plomp (Neurophysiology); Professor Michel D. Ferrari (Neurology), Professor Rune R. Frants (Genetics)

Effects of P/Q-type calcium channel mutations on neuromuscular synaptic transmission.

Techniques: neuromuscular junction electrophysiology (intracellular recordings), diaphragm/phrenic nerve and soleus/tibial nerve preparations, in vivo electromyography repetitive nerve stimulation, contraction experiments, pharmacological studies, electron microscopy, histology, mouse behavioral assessment, coordination of rodent breeding program and animal care applications.

• 2001 – 2002 / Summer 2004 / Summer 2005: B.Sc. dissertation & research visits

School of Biological and Biomedical Sciences, University of Durham, Durham, United Kingdom

Supervisor: Dr. Christopher L. Thompson

GABAA receptor profile in the cerebellum of the ataxic mouse mutant Tottering

Techniques: membrane preparations, radioligand binding studies, quantitative immunoblotting, semi-quantitative autoradiography, immunohistochemistry, in vitro animal research.

• Summer 2003: FENS School “Mouse Transgenics and Behaviour”

University of Zurich, Institute of Anatomy, Zurich, Switzerland

Training in mouse genetics and behavioural profiling.

• Autumn 2002: Laboratory Animal Research Course

University of Leiden, Leiden, The Netherlands

Training in laboratory animal research / award of personal license to perform animal research.

• 2001: Research visit to the Dept. of Pharmacology and Neuroscience

University of North Texas Health Science Center Fort Worth, Texas, U.S.A.

Supervisor: Professor Peter Koulen

Localization of Ves1/Homer proteins at the mammalian retina in a model of mild retinal ischemia and neuroprotection by estrogen.

Techniques: immunohistochemistry, electron and confocal microscopy.

• 2001: Research visit to the Dept. of Bacteriology and Molecular Biology

Denmark's Technical University, Lyngby, Denmark

Supervisor: Professor Anders Løbner-Olesen

Bacteriophage M13 biology and peptide expression libraries.

• August 2000 – August 2001: Internship (Industrial Placement Year)

Dept. of Molecular Biology and Virology, Novo Nordisk A/S, Copenhagen, Denmark

Supervisor: Dr. Steffen Faisst

Development of mammalian expression systems

Techniques: general molecular biology techniques (PCR, Northern blots, Southern blots, cloning and plasmid generation), cell culture, real-time PCR, luciferase and GFP assays, ELISA, bacteriophage cloning, peptide library generation and cloning.

• Summer 1999: Internship

Dept. of Molecular Biology and Virology, Bayer AG, Uerdingen, Germany

Supervisor: Dr. Gabriele Unger

Development of routine human papilloma virus (HPV) in situ hybridization assays for the early detection of cervical carcinoma.

Techniques: general molecular biology techniques (PCR, cloning, nucleotide labeling), in situ hybridization.

Peer-reviewed publications:

- [1] Burroughs, SL, Kaja, S, Koulen, P (2011) Quantification of deficits in spatial visual function of mouse models for glaucoma. *Invest Ophthalmol Vis Sci*. [Epub ahead of print]
- [2] Garg, P, Duncan, RS, Kaja, S, Zabaneh, A, Chapman, KD, Koulen, P (2011) Lauroylethanolamide and linoleylethanolamide improve functional outcome in a rodent model for stroke. *Neurosci Lett* 492:134-138.
- [3] Kaja, S, Duncan, RS, Longoria, S, Hilgenberg, JD, Payne, AJ, Desai, NM, Parikh, RA, Burroughs, SL, Gregg, EV, Goad, DL, Koulen, P (2011) Novel mechanism of increased Ca(2+) release following oxidative stress in neuronal cells involves type 2 inositol-1,4,5-trisphosphate receptors. *Neuroscience* 175:281-291.
- [4] Duncan, RS, Goad, DL, Grillo, MA, Kaja, S, Payne, AJ, Koulen, P (2010) Control of intracellular calcium signaling as a neuroprotective strategy. *Molecules* 15:1168-1195.
- [5] Garg, P, Duncan, RS, Kaja, S, Koulen, P (2010) Intracellular mechanisms of N-acylethanolamine-mediated neuroprotection in a rat model of stroke. *Neuroscience* 166:252-262.
- [6] Kaja, S, Van de Ven, RC, Broos, LA, Frants, RR, Ferrari, MD, Van den Maagdenberg, AM, Plomp, JJ (2010) Severe and progressive neurotransmitter release aberrations in familial hemiplegic migraine type 1 *Cacna1a* S218L knock-in mice. *J Neurophysiol* 104:1445-1455.
- [7] van den Maagdenberg, AM, Pizzorusso, T, Kaja, S, Terpolilli, N, Shapovalova, M, Hoebeek, FE, Barrett, CF, Gherardini, L, van de Ven, RC, Todorov, B, Broos, LA, Tottene, A, Gao, Z, Fodor, M, De Zeeuw, CI, Frants, RR, Plesnila, N, Plomp, JJ, Pietrobon, D, Ferrari, MD (2010) High cortical spreading depression susceptibility and migraine-associated symptoms in Ca(v)2.1 S218L mice. *Ann Neurol* 67:85-98.
- [8] Plomp, JJ, van den Maagdenberg, AM, Kaja, S (2009) The ataxic *Cacna1a*-mutant mouse rolling nagoya: an overview of neuromorphological and electrophysiological findings. *Cerebellum* 8:222-230.
- [9] Kaja, S, Van De Ven, RC, Frants, RR, Ferrari, MD, Van Den Maagdenberg, AM, Plomp, JJ (2008) Reduced ACh release at neuromuscular synapses of heterozygous leaner Ca(v)2.1-mutant mice. *Synapse* 62:337-344.
- [10] Kaja, S, Hann, V, Payne, HL, Thompson, CL (2007) Aberrant cerebellar granule cell-specific GABAA receptor expression in the epileptic and ataxic mouse mutant, Tottering. *Neuroscience* 148:115-125.
- [11] Kaja, S, Todorov, B, van de Ven, RC, Ferrari, MD, Frants, RR, van den Maagdenberg, AM, Plomp, JJ (2007) Redundancy of Cav2.1 channel accessory subunits in transmitter release at the mouse neuromuscular junction. *Brain Res* 1143:92-101.
- [12] Kaja, S, van de Ven, RC, Broos, LA, Frants, RR, Ferrari, MD, van den Maagdenberg, AM, Plomp, JJ (2007) Characterization of acetylcholine release and the compensatory contribution of non-Ca(v)2.1 channels at motor nerve terminals of leaner Ca(v)2.1-mutant mice. *Neuroscience* 144:1278-1287.

- [13] Kaja, S, van de Ven, RC, van Dijk, JG, Verschuuren, JJ, Arahata, K, Frants, RR, Ferrari, MD, van den Maagdenberg, AM, Plomp, JJ (2007) Severely impaired neuromuscular synaptic transmission causes muscle weakness in the Cacna1a-mutant mouse rolling Nagoya. *Eur J Neurosci* 25:2009-2020.
- [14] van de Ven, RC, Kaja, S, Plomp, JJ, Frants, RR, van den Maagdenberg, AM, Ferrari, MD (2007) Genetic models of migraine. *Arch Neurol* 64:643-646.
- [15] Kaja, S, Van de Ven, RC, Ferrari, MD, Frants, RR, Van den Maagdenberg, AM, Plomp, JJ (2006) Compensatory contribution of Cav2.3 channels to acetylcholine release at the neuromuscular junction of tottering mice. *J Neurophysiol* 95:2698-2704.
- [16] Todorov, B, van de Ven, RC, Kaja, S, Broos, LA, Verbeek, SJ, Plomp, JJ, Ferrari, MD, Frants, RR, van den Maagdenberg, AM (2006) Conditional inactivation of the Cacna1a gene in transgenic mice. *Genesis* 44:589-594.
- [17] Kaja, S, van de Ven, RC, Broos, LA, Veldman, H, van Dijk, JG, Verschuuren, JJ, Frants, RR, Ferrari, MD, van den Maagdenberg, AM, Plomp, JJ (2005) Gene dosage-dependent transmitter release changes at neuromuscular synapses of CACNA1A R192Q knockin mice are non-progressive and do not lead to morphological changes or muscle weakness. *Neuroscience* 135:81-95.
- [18] van den Maagdenberg, AM, Pietrobon, D, Pizzorusso, T, Kaja, S, Broos, LA, Cesetti, T, van de Ven, RC, Tottene, A, van der Kaa, J, Plomp, JJ, Frants, RR, Ferrari, MD (2004) A Cacna1a knockin migraine mouse model with increased susceptibility to cortical spreading depression. *Neuron* 41:701-710.
- [19] Kaja, S, Yang, SH, Wei, J, Fujitani, K, Liu, R, Brun-Zinkernagel, AM, Simpkins, JW, Inokuchi, K, Koulen, P (2003) Estrogen protects the inner retina from apoptosis and ischemia-induced loss of Vesl-1L/Homer 1c immunoreactive synaptic connections. *Invest Ophthalmol Vis Sci* 44:3155-3162.

Other publications:

- S. Kaja. Synaptic effects of mutations in neuronal Ca_v2.1 calcium channels. 2007
Doctoral thesis; ISBN 9-78097819050-7.
- S. Kaja. Recent progress in migraine research. *BNA Bulletin* 2007, 56:20-22.

Invited Lectures:

9th December 2010

Departmental Seminar, Institute of Physiology, University of Bern, Switzerland (Host: Dr. Nina Ullrich)
“Novel neuroprotective strategies for neurodegenerative disease: targeting intracellular calcium signaling”

6th February 2010

Invited Lecture, Perkin Elmer Germany and Hamburg Screening Port, Hamburg, Germany (Host: Dr. Martin Daffertshofer)
“Novel neuroprotective strategies for neurodegenerative disease: using high-resolution and high-throughput imaging for targeting intracellular calcium signaling”

6th November 2010

Opening lecture, European Molecular Biology Organization US Fellows Meeting 2010, San Diego, CA
“Neuroprotection in Alzheimer’s disease”

26th August 2010

Departmental Seminar, School of Biological Sciences, University of Missouri Kansas City, Kansas City, MO (Host: Dean Lawrence Dreyfus)
“Calcium signaling in neurological and neurodegenerative disease: novel avenues for neuroprotection”

12th February 2010

Departmental Seminar, School of Biological and Biomedical Sciences, University of Durham, UK
(Host: Dr. P.L. Chazot)
"Ca²⁺ signaling in neurodegenerative disease: novel avenues for neuroprotection"

8th May 2009

McKnight Brain Institute, University of Florida, Gainesville, FL (Host: Dr. D. Steindler)
Special Seminar: "Migraine, epilepsy, cerebellar ataxia and trauma: one pathophysiological mechanism?"

11th March 2009

Eye Foundation of Kansas City, UMKC School of Medicine, Department of Ophthalmology, Kansas City, MO (Host: Dr. N. Sabates)
Vision Research Seminar: "Novel Insights into Familial Hemiplegic Migraine: Involvement of the Visual System"

7th October 2008

Scientific Seminar, Memory Disorders Research Unit, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark (Host: Dr. Joergen E. Nielsen)
"Novel therapeutic approaches for cerebellar ataxias."

3rd October 2008

Scientific Seminar, Glostrup Research Institute, Glostrup Hospital, Glostrup, Denmark
(Host: Dr. Inger Jansen Olesen)
"Migraine: Insights from transgenic mouse models."

22nd June 2008

Expert Seminar, Neuromed Pharmaceuticals Ltd., Vancouver, B.C., Canada
"The role of Cav3.1 and GABA-A receptors in cerebellar ataxia."

8th April 2008

The Chris Thompson Memorial Symposium and Neuroscience North East,
School of Biological and Biomedical Sciences, University of Durham, Durham, UK
"Migraine: Insights from two novel transgenic mouse models."

22nd January 2008

Departmental Seminar, Department of Pharmacology and Neuroscience, University of North Texas Health Science Center, Fort Worth, TX (Host: Dr. M. Singh)
"Migraine: Insights from a novel transgenic mouse model."

23rd November 2007

Departmental Seminar, School of Biological Sciences, University of Liverpool, Liverpool, UK
(Host: Prof. Steve Edwards)
"Migraine: Insights from two transgenic mouse models."

11th May 2007

Departmental Seminar, Department of Pharmacology, University of Innsbruck, Innsbruck, Austria
(Host: Prof. Dr. J. Striessnig)
"Calcium Channel Dysfunction in Mouse Models for Epilepsy and Migraine."

9th May 2007

Departmental Seminar, Institute for Surgical Research, Ludwig-Maximilians-University Munich, Munich, Germany (Host: Prof. Dr. N. Plesnila)
"Cacna1a S218L Knock-In Mice: A Model for Migraine, Trauma and Ataxia."

7th May 2007

Departmental Seminar, Institute for Physiology II/Neurophysiology, University of Jena, Jena, Germany (Host: PD Dr. F. Richter)
"The Role of Calcium Channel Dysfunction in Migraine."

4th May 2007

Expert Seminar, Neuromed Pharmaceuticals Ltd., Vancouver, B.C., Canada
"Migraine: Insights from a novel mouse model with the S218L mutation in the P/Q-type Ca²⁺ channel."

10th October 2006

Colloquium, Michael Smith Laboratories, The University of British Columbia, Vancouver, BC, Canada
"Muscle Weakness Contributes to the Phenotype of Rolling Nagoya Mutant Mice."

3rd October 2006

Departmental Seminar, Department of Pharmacology and Neuroscience, University of North Texas Health Science Center, Fort Worth, TX (Host: Professor P. Koulen)
"Synaptic effects of mutations in neuronal Cav2.1 calcium channels."

22nd March 2006

Departmental Seminar, Department of Neuropathology, Friedrich Alexander University Erlangen-Nuremberg, Erlangen, Germany (Host: Prof. Dr. I. Blümcke)
"Synaptic effects of neurological disease-associated mutations in Cav2.1 calcium channels."

11th October 2005

Departmental Seminar, Center for Molecular Neurobiology, University of Hamburg, Hamburg, Germany (Host: Prof. Dr. T. Jentsch)
"Characterization of neuromuscular synaptic transmission in the novel *Cacna1a* knock-in mouse model for familial hemiplegic migraine."

16th May 2005

Laboratory Seminar, Professor Terrance Snutch, Michael Smith Laboratories, University of British Columbia, Vancouver, Canada
"Recent advances in the study of Ca²⁺ channel mutant mice."

20th July 2004

Departmental Seminar Molecular and Cell Biology Series, University of Durham, Durham, United Kingdom (Host: Dr. C.L. Thompson)
"P/Q-Type Calcium Channels in Health and Disease."

Conference contributions:

Taught workshops (Instructor)

Special Interest Group: "Smartphones in Ophthalmology". Association for Research in Vision and Ophthalmology Annual Meeting 2010, Fort Lauderdale, FL. Program #487

Skills Transfer Lab: "The iPhone for Ophthalmologists". American Academy of Ophthalmology Annual Meeting 2010, Chicago, IL, Program #LAB161

Citable abstracts

S. Kaja, R.S. Duncan, P. Garg, S.L. Burroughs, P. Koulen. Neuroprotection by N-linoleoyl ethanolamine in vitro and in vivo. Society for Neuroscience Annual Meeting 2010, San Diego, CA, Nov 16-21, 2010. Poster presentation.

A. Payne, S. Kaja, S.-Y. Hwang, P. Koulen. Presenilin potentiates ryanodine receptor-mediated calcium release from intracellular stores. Society for Neuroscience Annual Meeting 2010, San Diego, CA, Nov 16-21, 2010. Slide presentation.

R.S. Duncan, S. Kaja, J.D. Hilgenberg, J. Clark, P. Koulen. N-acyl ethanolamines activate transcription factors involved in neuroprotective signaling. Society for Neuroscience Annual Meeting 2010, San Diego, CA, Nov 16-21, 2010. Poster presentation.

A. Payne, S. Kaja, and P. Koulen. Control of Ryanodine Receptor Mediated Calcium Signaling by Presenilins in Mouse Retinal Ganglion Cells. ARVO Meeting Abstracts April 11, 2010 51:1876. Poster presentation.

- S. Kaja, D. L. Goad, E. V. Gregg, M. D. Ferrari, A. M. J. M. Van den Maagdenberg, T. P. Snutch, and P. Koulen. Reduced Presynaptic Signaling in Retinal Neurons of a Transgenic Mouse Model for Familial Hemiplegic Migraine. ARVO Meeting Abstracts April 11, 2010 51:5796. Slide presentation.
- S. Kaja, R.S. Duncan, E.V. Gregg, D.L. Goad, P. Koulen. Type 2 inositol-1,4,5-trisphosphate (IP₃) receptors mediate oxidative stress-induced increases of intracellular Ca²⁺ release. Society for Neuroscience Annual Meeting 2009, Chicago, IL, Oct 16-21, 2009. Poster presentation.
- P. Koulen, R.S. Duncan, S. Kaja, D.L. Goad. Potentiation of intracellular calcium release by gonadal steroid hormones in the central nervous system. Society for Neuroscience Annual Meeting 2009, Chicago, IL, Oct 16-21, 2009. Slide presentation.
- S. Kaja, D.L. Goad, E.S. Nixon, P. Koulen. Estrogen controls intracellular calcium signaling in the retina. Society for Neuroscience Annual Meeting 2009, Chicago, IL, Oct 16-21, 2009. Slide presentation.
- S. Kaja, E. Nixon, P. Koulen. Estrogen signaling in retinal neurons. Annual Meeting of the Association for Research in Vision and Ophthalmology 2009, Fort Lauderdale, FL, May 3-7, 2009. Poster presentation.
- S. Kaja, J. Mezeyova, L. Qiu, R.S. Gopaul, A.M. Van den Maagdenberg, D. Parker, T.P. Snutch. Reduced expression of low-voltage activated calcium channels and GABA type A receptors in the cerebellum of familial hemiplegic migraine type 1 S218L knock-in mice. Society for Neuroscience Annual Meeting 2008, Washington, D.C., Nov 14-19, 2008. Poster presentation.
- S. Kaja, M. Shapovalova, A. Tottene, J. Mezeyova, D. Parker, M.D. Ferrari, A.M. van den Maagdenberg, D. Pietrobon, T.P. Snutch. Absence of Functional Compensation in Cerebellar Neurons of Knock-in Mice with the Familial Hemiplegic Migraine Type 1 S218L Mutation. Society for Neuroscience Annual Meeting San Diego, CA 2007. Slide presentation
- S.Kaja, R.C.G. Van de Ven, M.D. Ferrari, R.R. Frants, A.M.J. Van den Maagdenberg, J.J. Plomp. Differential non-Cav2.1 compensation profiles at motor nerve terminals of Leaner and Null Cav2.1-mutant mice. Society for Neuroscience Annual Meeting Atlanta, GA 2006. Slide presentation
- S. Kaja, R.C.G. Van de Ven, L.A.M. Broos, R.R. Frants, M.D. Ferrari, A.M.J. Van den Maagdenberg, J.J. Plomp Increased transmitter release at neuromuscular synapses of a novel Cacna1a S218L knock-in mouse model for familial hemiplegic migraine. Society for Neuroscience Annual Meeting San Diego, CA 2004. Slide presentation
- S. Kaja, A.M.J.M. van den Maagdenberg, L. Broos, R.C.G. van de Ven, M.D. Ferrari, R.R. Frants and J.J. Plomp. Neuromuscular Transmission is altered in a novel transgenic mouse model with the familial hemiplegic migraine type-1 R192Q mutation. British Neurosci. Abstr., vol 17, P28.05, 2003. Poster presentation
- S. Kaja, S. Yang, R. Liu, K. Fujitani, A.-M. Brun-Zinkernagel, J.H. Brandstatter, J.W. Simpkins, K. Inokuchi, P. Koulen. Loss of Vesl-1L/Homer-1c in the retina indicative of early neuronal changes following mild neuronal damage and protection by estrogen. British Neurosci. Abstr., vol 17, P56.12, 2003. Poster presentation
- S. Kaja, A. Wilton, M. Bingley, P. Tiwari, C.L. Thompson. Expression of cerebellar granule cell-specific GABA-A receptors is impaired in the epileptic and ataxic mouse, tottering. British Neurosci. Abstr., vol 17, P58.03, 2003. Poster presentation
- S. Kaja, S. Yang, R. Liu, K. Fujitani, A.-M. Brun-Zinkernagel, J.H. Brandstatter, J.W. Simpkins, K. Inokuchi, P. Koulen. Vesl-1L/Homer-1c expression in the rat retina and changed expression during retinal ischemia and neuroprotection by estrogen. Society for Neuroscience Annual Meeting Orlando, FL 2002. Slide presentation

Other abstracts

- S. Kaja, J. Mezeyova, E.O. Nielsen, N.R. Mirza, D. Parker, T.P. Snutch. GABA type-A receptors in the cerebellum of familial hemiplegic migraine type 1 S218L knock-in mice. European Molecular Biology

- Organization US Fellows Meeting 2008, Boston, MA, November 7-9, 2008. Slide and poster presentation.
- S. Kaja, J. Mezeyova, D. Parker, T.P. Snutch. Reduced Cav3.1 Calcium Channel Expression in the Cerebellum of Knock-in Mice with the Familial Hemiplegic Migraine Type 1 S218L Mutation. European Molecular Biology Organization Fellows Meeting 2008, Heidelberg, Germany; June 12-15, 2008. Slide and poster presentation.
- S. Kaja, J. Mezeyova, D. Parker, T.P. Snutch. Migraine: insights from two novel transgenic mouse models. The Chris Thompson Memorial Symposium / Neuroscience North East, Durham, United Kingdom, April 8-9, 2008. Slide presentation.
- S. Kaja, E. Gregg, L.S. David, J.J. Plomp, A.M. van den Maagdenberg, P. Koulen, T.P. Snutch. Altered expression of calcium channels in retinae of transgenic knock-in mice with the familial hemiplegic migraine mutation R192Q in Cacna1a. EMBO Fellows USA Meeting 2006, Nov11-13, Salk Institute, La Jolla, CA. Poster presentation.
- S. Kaja, R.C. van de Ven, R.R. Frants, M.D. Ferrari, A.M. Van den Maagdenberg, J.J. Plomp. Characterization of neuromuscular synaptic transmission in the novel Cacna1a S218L knock-in mouse model for familial hemiplegic migraine. Postgraduate and Early-Career Symposium 2005, Sep 14-15, Durham, UK. Slide presentation.
- S. Kaja, R.C. van de Ven, R.R. Frants, M.D. Ferrari, A.M. Van den Maagdenberg, J.J. Plomp. Neuromuscular synaptic characterization of a novel cacna1a knock-in mouse with the FHM1 S218L mutation. Endo-Neuro-Psycho Meeting 2005, June 2, Doorwerth, The Netherlands. Poster presentation.
- S. Kaja, R.C. van de Ven, L.A. Broos, H. Veldman, J.G. van Dijk, J.H. Wokke, R.R. Frants, M.D. Ferrari, J.J. Verschuuren, A.M. van den Maagdenberg, J.J. Plomp. Familial Hemiplegic Migraine Type-1 R192Q Knock-In Mice Exhibit Altered Neuromuscular Synaptic Transmission. Endo-Neuro-Psycho Meeting 2004, June 1-4, 2004, Doorwerth, The Netherlands. Poster presentation.
- A.M. Van den Maagdenberg, J.J. Plomp, L.A.M. Broos, S. Kaja, R.C. Van de Ven, M.D. Ferrari, R.R. Frants. A novel transgenic mouse model with the R192Q Familial Hemiplegic Migraine mutation: generation and preliminary (electrophysiological) characterization. The 2003 European Human Genetics Conference 2003, May 3-6, Birmingham, UK. Poster presentation.
- S. Kaja, S. Yang, R. Liu, A.M. Brun-Zinkernagel, J.W. Simpkins, P. Koulen. Loss of Vesl-1L/Homer-1c in the retina indicative of early neuronal changes following mild neuronal damage and protection by estrogen. International Symposium "Molecular Basis of CNS Disorders" 2003, February 20-22, Bonn, Germany. Poster presentation.
- S. Kaja, J.J. Plomp, L.A. Broos, R.C. van de Ven, A.M. van den Maagdenberg, R.R. Frants, M.D. Ferrari. Ex vivo electrophysiology at the mouse neuromuscular junction. Topiramate Preclinical Update Meeting Johnson & Johnson 2003, Jan 16-18, Coral Gables, FL. Slide presentation.
- S. Kaja, A. Wilton, M. Bingley, P. Tiwari, C.L. Thompson. Expression of an extrasynaptic, cerebellar granule cell-specific GABA-A receptor subtype is selectively impaired in the epileptic and ataxic mouse, Tottering. Neuroscience North East Conference 2002, Dec 16-17, Sunderland, UK. Slide presentation.