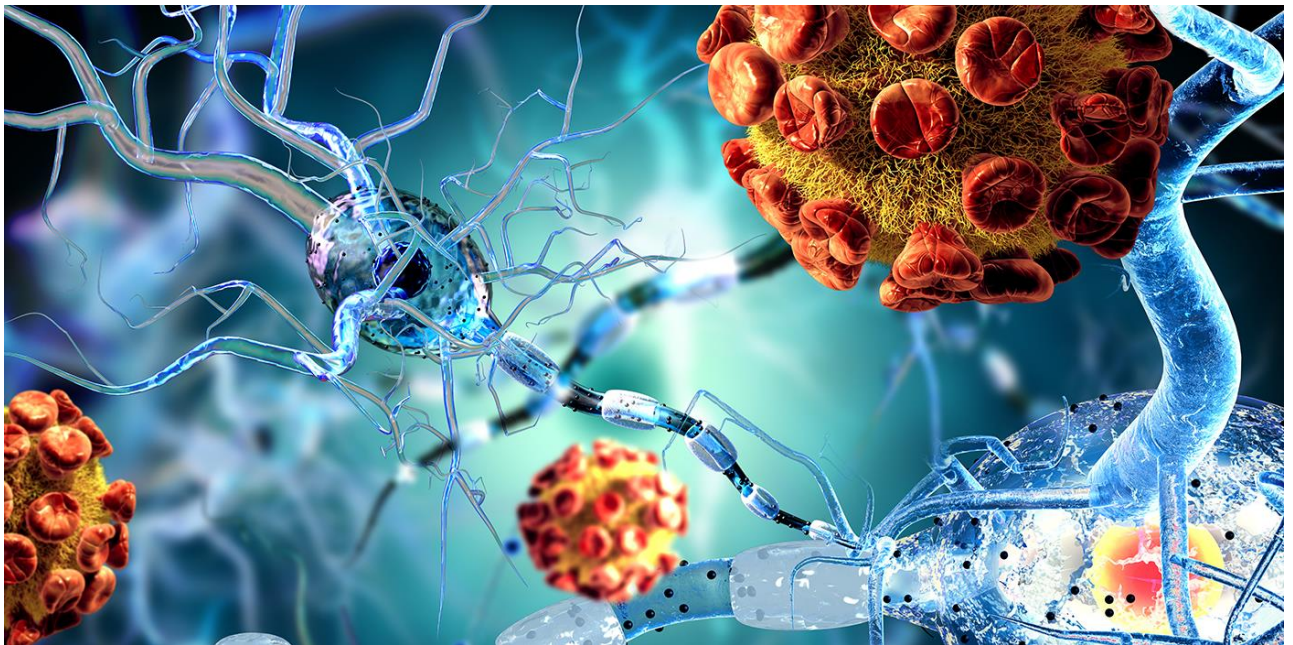




Annual Report of Research Activity 2016



Division of Clinical Neuroscience
University of Oslo and Oslo University Hospital





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Oslo University Hospital and The University of Oslo

Oslo University Hospital (OUH) is Norway's largest hospital with over 20 000 employees and a budget of 20 billion NOK. The Hospital has a local function for parts of Oslo's population. It has a regional function for the inhabitants in the South-Eastern Norway Regional Health Authority, and it also has a large number of national functions. The Hospital is responsible for the majority of medical research and education of health personnel in Norway.

The University of Oslo (UiO) is Norway's largest research and educational institution with 28 000 students and 7 000 employees. Professional breadth and internationally recognized research environments make UiO an important contributor to society. The Faculty of Medicine was established in 1814 and works for progressive education, research and dissemination for the patients' and society's best interests.

From Division Director Eva Bjørstad

Being the largest hospital in Norway, Oslo University Hospital provides highly specialized health care services to the citizens of Oslo and the Southeast health region. In addition, the Hospital has a nationwide responsibility for a number of national and multi-regional assignments. The Division of Clinical Neuroscience encompasses the fields neurology, neurosurgery, physical medicine and rehabilitation, neurohabilitation and neuropsychiatry. The proximity to patients and their medical issues are the cornerstones for the research conducted at our Hospital and is aimed at improving patient care. High ethical standards ensure the confidentiality and our goal is to continuously improve diagnostics, treatment and management for all our patients.

Research activity at the Division of Clinical Neuroscience

The Division's research activity is organized into 15 different research groups covering a broad range of basic, clinical and epidemiological research with an overall aim to improve patient care with emphasis on diagnostic, therapeutic and preventive measures. Most group leaders have a combined position at Oslo University Hospital and the University of Oslo. In total the Division has 19 Professors, 5 Associate Professors, several postdoctoral fellowships and PhD students, administrative staff and technical staff. The Division has an advisory research board that in 2016 consisted of: Professor and Head of Research John-Anker Zwart, Division Director Eva Bjørstad, Senior Consultant Morten Lossius, Professor and Senior Consultant Eirik Helseth, Senior Consultant Mona Skjelland, Senior Consultant Nada Andelic, Senior Physical Therapist Slawomir Wojnusz, Quality and healthcare adviser Hege Hammer and Administrative Manager Agnete Hager. In 2016 there were in total 183 registered peer reviewed publications and 14 PhD dissertations.

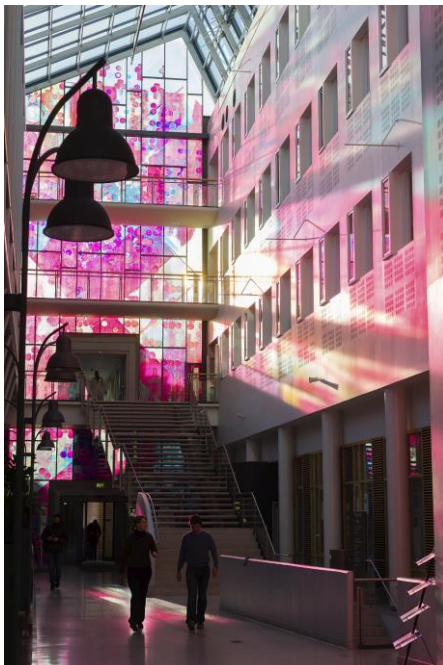
Eva Bjørstad



Division of Clinical Neuroscience



*UiO employee(s)



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NVR Research groups

Department of Physical Medicine and Rehabilitation

Rehabilitation after trauma. Group Leader: Nada Andelic

Painful musculoskeletal disorders. Group Leader: Cecilie Røe

Department of Refractory Epilepsy – National Centre for Epilepsy

Complex epilepsy. Group Leader: Morten I. Lossius

Department for Neurosurgery

Neurovascular-Hydrocephalus Research Group. Group Leader: Per Kristian Eide

Oslo Neurosurgical Outcome Study Group (ONOSG). Group Leader: Eirik Helseth and Torstein Meling

Vilhelm Magnus Laboratory for Neurosurgical Research. Group Leader: Iver A. Langmoen

Department of Neurology

Movement Disorders. Group Leader: Espen Dietrichs

Cerebrovascular Research Group. Group Leader: David Russell

Epilepsy Research Group – Department of Neurology. Group Leader: Erik Taubøll

Multiple Sclerosis (MS). Group Leader: Hanne F. Harbo

Pain Conditions. Group Leader: John-Anker Zwart

Department of Psychosomatic Medicine

Brain plasticity and neuropsychiatry. Group Leader: Torbjørn Elvsåshagen

Psycho-neuro-endocrinology. Sex on Brain European Research (SOBER). Group Leader: Ira Haraldsen

Department of Neurohabilitation

Neurohabilitation. Group Leader: Bjørnar Hassel

Sunnaas Rehabilitation Hospital

Specialized medical rehabilitation – Sunnaas Rehabililtation Hospital. Group Leader: Johan Stanghelle.



Rehabilitation after trauma



Group Leader

Nada Andelic, MD/PhD, Researcher, Dept. of Nursing Science, UiO
(nada.andelic@medisin.uio.no) / OUH (nadand@ous-hf.no)

Group members

- Cecilie Røe, Professor, UiO
- Erik Bautz-Holter, Professor emeritus, UiO
- Helene Lundgaard Sjøberg, PhD, Senior researcher, OUH
- Unni Sveen, Professor, UiO
- Tonje Haug Nordenmark, PhD, Postdoc, OUH
- Marit V. Forslund, PhD fellow, UiO
- Tanja Karic, PhD fellow, UiO
- Torgeir Hellstrøm, PhD fellow, UiO
- Ingerid Kleffegaard, PhD fellow, OUH
- Mari S. Rasmussen, PhD fellow, UiO
- Emilie I. Howe, Cand Psych, PhD fellow, UiO
- Knut-Petter S. Langlo, PhD fellow, UiO
- Cathrine Buaas Tverdal, MSC student, UiO
- Sidsel Fjelltun, project coordinator, OUH

Associated group members

- Line Preede, MS research program, UiO

Research profile and aims

The research group generates knowledge about the mechanisms and consequences of trauma, patient care, trends and challenges in treatment and rehabilitation including the patients' healthcare needs. The main research focus is traumatic brain injuries (TBIs). The research conducted by this group is multidisciplinary and collaborative, where collaboration between genetics, intensive medicine, neurosurgery, neuroradiology, neuropsychology and rehabilitation has been established over the last 10 years. By combining the perspectives and methods of basal, clinical and health care service research, we may provide unique knowledge on the consequences of injuries, how to organize effective patient care and improve the functional outcomes after injuries.

The main aims are:

1. To better understand the mechanisms, course and consequences of TBI and multiple traumas by using translational research strategy.
2. To develop and build evidence based efficient protocols for the rehabilitation implementation.
3. To strengthen existing and initiate new national and international research collaborations on trauma/TBI research.

Main ongoing projects

- *Center-TBI (Collaborative European NeuroTrauma Effectiveness Research in TBI)*. Principal investigator at the Oslo University Hospital Study Site of Center-TBI Nada Andelic.
- *Morphological brain damage and functional impairment following mild traumatic brain injury*. Principal investigators Cecilie Røe and Nada Andelic; PhD fellow Torgeir Hellstrøm.
- *The course of functional recovery after moderate-to-severe TBI (5, 10 and 20 years after injury)*. In collaboration with Sunnaas Rehabilitation hospital. Principal investigator Nada Andelic, PhD fellow Marit Forslund; researchers: Torgeir Hellstrøm, Emilie I. Howe.
- *The family as a resource for improved patient and family functioning after traumatic brain injury*. A randomized controlled trial of a family centered intervention. Principal investigator Helene L. Sjøberg, PhD fellow Mari S. Rasmussen.
- *The effect evaluation of combined cognitive and vocational interventions after mild-to-moderate traumatic brain injury: a randomized controlled trial and qualitative process evaluation*. Principal Investigator: Nada Andelic, Phd fellows: Emilie I. Howe, Knut-Petter S. Langlo.
- *Traumatic brain injury; needs and treatment options in the chronic phase. A randomized controlled community-based intervention*. Principal investigator: Cecilie Røe.

Other projects

- *Vestibular Rehabilitation for Patients with Dizziness and Balance Problems after Traumatic Brain Injury*. In collaboration with Oslo and Akershus University College of Applied Sciences (HiOA) Principal investigator Helene L. Sjøberg; PhD fellow Ingerid Kleffegård.
- *Effect of early rehabilitation in patients with acute subarachnoid hemorrhage*. Principal investigators Cecilie Røe and Angelika Sorteberg (Nevrokirurgisk avdeling), PhD fellow Tanja Karic.
- *Transitions in rehabilitation: Biographical reconstruction, experiential knowledge and professional expertise*. In collaboration with HiOA. Investigators from OUH Helene L. Sjøberg and Unni Sveen.
- *Effect of adapted physical activity and goal-setting on physical and mental health. In collaboration with Beitostølen Health Sport Center*. Principal investigators Cecilie Røe and Erik-Bautz Holter, fellow Line Preede.

Funding

- European Union's Seventh Framework Programme for Research and Development
- Norwegian Research Council
- Norwegian Extra Foundation for Health and Rehabilitation
- University of Oslo
- Oslo University Hospital



Most important national and international collaborators

National

Oslo Traumatic Brain Injury Outcome and Rehabilitation Research Network (OBIOR-research network)
- Hospitals in the South-East Region including Sunnaas Rehabilitation Hospital
- The Norwegian University Hospitals
- Oslo and Akershus University College of Applied Sciences
- Universities of Oslo, Bergen, Trondheim and Tromsø

International

- Karolinska, Uppsala, Umeå and Salgrenska University Hospitals, Sweden
- Copenhagen University Hospital and Hammel Rehabilitation and Research Centre, Denmark
- Virginia Commonwealth University, Richmond, US
- BioCruces Health Research Institute, Spain
- University of Gottingen, Germany
- CENTER-TBI collaborators across the European hospitals/universities

Scientific production of the research group in 2016

Peer reviewed original research articles: 20

Other publications: 15

Invited lectures at international congresses:

- Andelic N. Invited speaker at the 11th World congress on Brain Injury, IBIA, Haag, Netherlands and SNS-SEENSNS 2016 congress Controversies in Neurotraumatology, Novi Sad, Serbia
- Røe C/ Andelic N: Research seminars at the Virginia Commonwealth University, Richmond and Howard University, Washington DC, US (Mai 2016)

Selected publications:

Karic T, Røe C, Nordenmark TH, Becker F, Sorteberg A (2016). *Impact of early mobilization and rehabilitation on global functional outcome one year after aneurysmal subarachnoid hemorrhage.* J Rehabil Med, 48 (8), 676-682

Røe C, Preede L, Dalen H, Bautz-Holter E, Nyquist A, Sandvik L, Saebu M (2016). *Does adapted physical activity-based rehabilitation improve mental and physical functioning? A randomized trial.* Eur J Phys Rehabil Med (in press)

Hellstrøm T, Westlye LT, Server A, Løvstad M, Brunborg C, Lund MJ, Nordhøy W, Andreassen OA, Andelic N (2016). *Volumetric and morphometric MRI findings in patients with mild traumatic brain injury.* Brain Inj, 30 (13-14), 1683-1691

Special Issue Behav Neurol: Andelic N, Sigurdardottir S, Arango-Lasprilla JC, Godbolt AK (2016). *Long-Term Functional and Psychosocial Consequences and Health Care Provision after Traumatic Brain Injury.* Behav Neurol, 2016, 2678081



Painful musculoskeletal disorders



Group Leader

Cecilie Røe, Professor, Head of Dept of Physical Medicine and Rehabilitation, UiO
(cecilie.roe@medisin.uio.no)/ OUH (cecilie.roe@ous-hf.no)

Group Members

- Erik Bautz-Holter, Professor emeritus, UiO
- Siri Bjorland, PhD student, UiO
- Jens Ivar Brox, Professor, UiO
- Kaia Beck Engebretsen, PT, PhD, OUH
- Aasne Hoksrud, PhD, OUH
- Niels-Gunnar Juel, MD, OUH
- Synnøve Kvalheim, PhD student, UiO
- Elisabeth Kvalvaag, PhD student, UiO
- Aurora Lie Moen, PhD student, UiO
- Kjersti Myhre, PhD, OUH
- Line Preede, Research line student, UiO
- Elina Schistad, PhD, postdoctoral student Pain Medicine, UiO
- Sigrid Skatteboe, PhD student, OUH

Research profile and aims

The research unit generates knowledge regarding diagnostics, treatment and rehabilitation of painful musculoskeletal conditions. The main focus is on neck, back and shoulder conditions. The research is multidisciplinary, and collaboration with basal, clinical and health care service milieus established. Based on the framework of the International Classification of Functioning, Disability and Health (ICF) and the biopsychosocial model, interaction between the genetic and other basal disease mechanisms with psychosocial, personal and environmental factors are studied regarding the course of pain, functioning and participation. Furthermore, developing and evaluating treatment models in prospective and randomized studies, aiming to improve functioning and return to work are focus areas.

The main aims are:

- To understand the mechanisms, course and consequences of painful musculoskeletal conditions.
- To develop and evaluate treatment models for painful musculoskeletal conditions.



Ongoing projects

- Low back pain, workplace absenteeism and disability pensioning – the interaction between type of occupation, psychosocial risk factors and genetic susceptibility. Principal investigators Cecilie Røe and Johannes Gjerstad, National Institute of Occupational health. PhD fellow Aurora Moen
- The long-term course of low back pain and radiculopathy. PhD student Aurora Moen
- Reliability of Modic changes. Principal investigator Elina Schistad
- Efficacy of labral repair, biceps tenodesis and diagnostic arthroscopy for SLAP lesions of the shoulder, a randomized controlled trial. Principal investigator Jens Ivar Brox. PhD fellow Cecilie Piene Schrøder
- Significance of diagnostics and effect of pressure wave treatment in addition to guided training, head of project Erik Bautz Holter, PhD fellow Elisabeth Kvalvaag.
- An investigation of neck/back and shoulder patients expectations to treatment outcome, regarding pain-reduction and functional improvements. Principal investigator Lars-Petter Granan. PhD fellow Sigrid Skatteboe
- Improving functioning and participation among persons with physical disabilities. Principal investigator Cecilie Røe. Research line student Line Preede
- Clinical course and prognostic factors for shoulder pain patients in primary and specialized care. Principal investigator Kaia Engebretsen
- Frozen shoulder- a prospective study with 4 years follow up. Principal investigator Niels Gunnar Juel
- Antibiotic treatment in patients with chronic low back pain and Modic Changes: randomized trial. Conducted by FORMI. Principal investigator in the research group Jens Ivar Brox, and Elina Schistad

Most important national and international collaborators

National

- Dept of Orthopaedics, OUH
- National Institute of Occupational Health
- Dept of Physical medicine and Rehabilitation at St Olavs Hospital / Trondheim University Hospital, University Hospital of North Norway and Haukeland University Hospital

International

- Torsten Gordh, Uppsala University, Sweden
- Juan Lu, Paul Perrin, Virginia Commonwealth University, US
- ICF Research Branch, Switzerland
- University of Munich, Switzerland
- University of Lucerne, Switzerland





Scientific production of the research group in 2016

Peer reviewed original research articles: 16

Other publications: 14

Invited lectures at international congresses: 4

Doctoral dissertation:

Synnøve Kvalheim: Potential risk factors for chronic musculoskeletal complaints in a general population. The HUNT-study. UiO 30. sep. 2016

Selected publications:

Myhre K, Lau B, Marchand GH, Leivseth G, Bautz-Holter E, Røe C (2016) Demand, Control and Support at Work Among Sick-Listed Patients with Neck or Back Pain: A Prospective Study. *J Occup Rehabil*, 26 (2), 183-94

Omair A, Mannion AF, Holden M, Leivseth G, Fairbank J, Hägg O, Fritzell P, Brox JI. Age and pro-inflammatory gene polymorphisms influence adjacent segment disc degeneration more than fusion does in patients treated for chronic low back pain. *Eur Spine J*. 2016 Jan;25(1):2-13. doi: 10.1007/s00586-015-4181-x. Epub 2015 Aug 18.

Reme SE, Tveito TH, Harris A, Lie SA, Grasdahl A, Indahl A, Brox JI, Tangen T, Hagen EM, Gismervik S, Ødegård A, Fryland L, Fors EA, Chalder T, Eriksen HR. Cognitive Interventions and Nutritional Supplements (The CINS Trial): A Randomized Controlled, Multicenter Trial Comparing a Brief Intervention With Additional Cognitive Behavioral Therapy, Seal Oil, and Soy Oil for Sick-Listed Low Back Pain Patients. *Spine (Phila Pa 1976)*. 2016 Oct 15;41(20):1557-1564

Skatteboe S, Roe C, Perrin PB, Dalen H, Bautz-Holter E, Nyquist A, Saebu M (2016) One-year trajectories of motivation and physical activity in persons with disabilities *J Rehabil Med*, 48 (4), 371-7

Funding

- The Research Council of Norway
- South-Eastern Norway Regional Health Authority
- Sofies Minde Ortopedi
- Oslo University Hospital (interaction means)



Complex epilepsy



Group Leader

Morten I. Lossius, MD/PhD, Consultant neurologist, National Centre for Epilepsy, OUH (morteni@ous-hf.no)

Group Members

- Karl Otto Nakken, MD/PhD, SSE
- Marit Bjørnvold, MD/PhD, SSE
- Erik Hessen, Prof dr.philos, SSE, UiO
- Ylva Østby, PhD, SSE
- Cecilie Johannessen Landmark MSc/PhD, SSE, HIOA
- Kristin Alfstad, MD, SSE
- Anette Ramm-Pettersen, MD, SSE, UiO
- Magnhild Kverneland, MSc, SSE,UiO
- Kari Modalsli Aaberg, MD, SSE,UiO
- Hilde Karterud, Nurse, Cand.san, SSE,UiO
- Antonia Vilagran, MD, SSE,UiO
- Oliver Henning, MD, SSE
- Torleiv Svendsen,MD SSE, SI-L

Associated group members

- Anette Huuse Farmen, MD,OUS, SI-L
- Silje Syrstad, Educationalist, UiO
- Marte Syvertsen Vestre Viken, UiO

Research profile and aims

Clinical research in patients with difficult-to-treat epilepsy, with particular focus on:

1. Characterisation of different epilepsy syndromes (genotype/phenotype)
2. Clinical pharmacology of antiepileptic drugs
3. Different diagnostic and treatment options; EEG, pharmacotherapy, surgery, VNS, diets
4. Psychosocial, psychiatric and neurocognitive aspects
5. Psychogenic non-epileptic seizures

Ongoing projects

PhD candidates in the UiO PhD program:

- Kari Modalsli Aaberg: *Epilepsy in young children*. Supervisor: Camilla Stoltenberg. Co-supervisors: Pål Suren, Per Magnus, Richard Chin and Morten I. Lossius
- Hilde Karterud: *Medically unexplained seizures: a qualitative study of the development of patients illness perceptions*. Supervisor: Mette Bech Risør. Co-supervisor: Ole Rikard Haavet
- Magnhild Kverneland: *Effect of modified Atkin's diet in adult patients with pharmacoresistant focal epilepsy. A randomized controlled study*. Supervisor: Karl Otto Nakken. Co-supervisor: Erik Taubøll
- Antonia Villagran. *Psychiatric comorbidity in patients with psychogenic non-epileptic seizures (PNES)*. Supervisor: Morten I. Lossius. Co-supervisor: Roderick Duncan
- Torleiv Svendsen: *Tolerability and efficacy of new antiepileptic drugs*. Supervisor: Cecilie Johannessen Landmark. Co-supervisors: Ole Morten Rønning and Morten I. Lossius

PhD-candidates not yet in the UiO PhD program:

- Eli B. Kyte: *Impact of epilepsy surgery on cognition, psychiatry and quality of life at the commencement of aging*. Supervisor: Morten I. Lossius
- Charlotte Lunde: *Could Computerized Working Memory Training be an alternative to stimulant medication for children and adolescents with attention deficits and epilepsy? A randomized, blinded, controlled trial*. Supervisor: Morten I. Lossius. Co-supervisor: Gro Løhaugen
- Oliver Henning: *Sexuality, depression and side effects in refractory epilepsy patients*. Supervisor: Morten I. Lossius

PhD-candidates in the UiO PhD program, associated to the group:

- Anette Huuse Farnen: *Effect of epilepsy and antiepileptic drugs in pregnancy: cognition, neurodevelopmental symptoms and obstetric outcome in offspring – a prospective cohort study*. Supervisor: Morten I. Lossius. Co-supervisor: Merethe Øien
- Silje Syrstad: *Nocturnal epileptiform activity in EEG and language skills*. Supervisor: Solveig Alma Lyster. Co-supervisor: Marit Bjørnvold

Innovation project:

- Charlotte Lunde. *Selfmotivating computerized working memory training in ADHD*. Oslo University Hospital, Oslo Med-Tec, Inven2

International projects:

- EURAP study. An International Antiepileptic Drugs and Pregnancy Registry (<http://www.eurapinternational.org/>) Silje Alvestad, National coordinator
- Twin study. An international genetic study of twins with epilepsy. Karl Otto Nakken, co-researcher
- E-PILEPSY is a pan European project, with the primary aim of improving awareness and accessibility of surgery for epilepsy across different countries. Epilepsy surgery is an established treatment in the management of individuals with drug resistant focal epilepsy (<http://www.e-pilepsy.eu/>). Morten I. Lossius, associated partner
- Nordic prospective observational study of outcomes after rare epilepsysurgery procedures. Tale Torjussen
- TRACE (Transcutan VNS (t-VNS) for drug resistant epilepsy)- Oliver Henning, Konstantin Kostov
- Pharmacokinetic variability, efficacy and tolerability of a new antiepileptic drug, brivaracetam. Scandinavian project between the National Center for Epilepsy in Norway and Denmark (Filadelfia, Dianalund). Torleiv Svendsen, PhD-student and medical leader, Cecilie Johannessen Landmark, project leader et al
- Children with refractory epilepsy and use of the newest antiepileptic drugs. Scandinavian project between the National Center for Epilepsy in Norway and Denmark (Filadelfia, Dianalund). Margrete Larsen Burns, PhD-student, Marina Nikoronova, responsible in Denmark, Cecilie Johannessen Landmark, project leader et al
- EDDI EMG triggered seizure alarm. Oliver Henning in cooperation with Danish Epilepsy Center Dianalund
- Scandinavian multi-registry study of antiepileptic drug teratogenicity: the SCAN-A study (Silje Alvestad post-doc i samarbeid med UiB/Haukeland)
- Tosca : TuberOus SCLerosis Registry to IncreAse Disease Awareness
Internationalt multisenter studie. Retrospektivt og prospektivt sykdomsregister. Målet med studien er å undersøke den kliniske utviklingen av sykdomsmanifestasjoner hos pasienter med Tuberøs sklerose. Marit Bjørnvold, Caroline Lund
- EXIST 3: En randomisert international , dobbelt blindet, placebo kontrollert multisenterstudie for å se effekt av everolimus som tilleggsterapi hos pasienter med Tuberøs sklerose og refraktær epilepsi. Marit Bjørnvold

Most important national and international collaborators

National

- Eylert Brodtkorb, St. Olavs Hospital/ Trondheim University Hospital
- Erik Taubøll, OUH

International

- Torbjørn Tomson, Karolinska Institutet, Stockholm, Sweden. (European Registry of Antiepileptic drugs and Pregnancy)
- P Ryvlin (Lyon), H Cross (London), K Braun (Utrecht), P Dimova (Sofia), S Francione (Milano), H Hecimovic (Zagreb), C Helmstaedter (Bonn), V Kimiskidis (Thessaloniki), K Malmgren (Göteborg), P Marusic (Praha), E Trinká (Salzburg), and B Steinhoff (Kork). (The E-PILEPSY project)
- Marina Nikoronova, Dianalund, Denmark (Children and new antiepileptic drugs)
- Christoph Helmstaedter Bonn University Hospital



Funding

- South-Eastern Norway Regional Health Authority
- Norwegian ExtraFoundation for Health and Rehabilitation
- Norwegian School of Sport Science
- Innlandet Hospital Trust
- The Competence Centre for Mental Delay and Epilepsy
- ADHD network research funds
- Inven2

Scientific production of the research group in 2016

Peer reviewed original research articles: 19

Other publications: 6

Dissertation: June 2016

Kristin Alfstad: *Prevalence of psychiatric symptoms in children and youth with epilepsy and executive dysfunction as a possible predictor of psychiatric disease*. Supervisor: Morten I. Lossius.
Co-supervisor: Leif Gjerstad

Invited lectures at international congresses:

Johannessen Landmark, C. Invited speaker. Pharmacological variability of antiepileptic drugs, European Epilepsy Congress, Prague, sept 2016

Johannessen SI and Johannessen Landmark, C. Invited speaker. Therapeutic drug monitoring of antiepileptic drugs, European Epilepsy Congress, Prague, sept 2016

Johannessen Landmark, C. Invited speaker. Pharmacogenetics in epilepsy, Baltic sea summer school on epilepsy, Lithuania, aug 2016

Johannessen SI and Johannessen Landmark, C. Invited speaker. Efficacy and tolerability of newer antiepileptic drugs, Lithuania, aug 2016

Johannessen Landmark, C. Invited chairman, Johannessen SI. Member of organizing committee, teaching course, and invited chairman, European Epilepsy Congress, Prague, sept 2016

Ylva Østby Invited speaker, memory in Epilepsy. European Epilepsy Congress, Prague, sept 2016

Ylva Østby Invited chairman , memory in Epilepsy. European Epilepsy Congress, Prague, sept 2016

Oliver Henning, invited speaker, Child neurology congress Germany





Selected publications:

Aaberg KM, Bakken IJ, **Lossius MI**, Lund Søråas C, Håberg SE, Stoltenberg C, Surén P, Chin R (2016) Comorbidity and Childhood Epilepsy: A Nationwide Registry Study
Pediatrics, 138 (3)

Alfstad KÅ, **Torgersen H**, Van Roy B, **Hessen E**, Hansen BH, Henning O, Clench-Aas J, Mowinckel P, Gjerstad L, **Lossius MI** (2016)
Psychiatric comorbidity in children and youth with epilepsy: An association with executive dysfunction? Epilepsy Behav, 56, 88-94

Svendsen T, Brodtkorb E, Reimers A, Molden E, **Sætre E**, **Johannessen SI**, **Johannessen Landmark C** (2016) Pharmacokinetic variability, efficacy and tolerability of eslicarbazepine acetate-A national approach to the evaluation of therapeutic drug monitoring data and clinical outcome Epilepsy Res, 129, 125-131



Neurovascular-Hydrocephalus Research Group



Group Leader

Per Kristian Eide, Professor, Dept of Neurosurgery, UiO (p.k.eide@medisin.uio.no)/
Head of Section, Dept of Neurosurgery, OUH (peide@ous-hf.no)

Group Members

- Brastad Evensen, Karen, PhD fellow, OUH
- Dahlberg, Daniel, PhD fellow, OUH
- Eide, Per Kristian, professor, OUH
- Eidsvåg, Vigdis A, PhD fellow, OUH
- Fric, Radek, PhD fellow, OUH
- Evju, Øyvind, PhD fellow, UiO
- Hassan, Mahdi, PhD fellow, UiO
- Karic, Tanja, PhD fellow, OUH
- Lindegaard, Karl-Fredrik, Professor, OUH
- Lundar, Tryggve, Professor, OUH
- Meling, Torstein R, dr.med., OUH
- Paulsen, Henriette, PhD fellow, OUH
- Ringstad, Geir A., Senior Consultant, OUH
- Slettebø, Haldor, Senior Consultant, OUH
- Sortberg, Angelika, dr.med., OUH
- Sorteberg, Wilhelm, dr.med., OUH
- Stanisic, Milo, dr.med., OUH

Research profile and aims

The research group focuses on clinical and translational neurosurgical research within the fields of neurovascular disease and cerebrospinal fluid disorders.

1. Cerebrovascular disorders. Cerebral hemodynamics. Focus on intracranial aneurysms and subarachnoid hemorrhage, including neurointensive monitoring and outcome.
2. Brain Monitoring. Several projects study intracranial pathophysiology with a strong focus on intracranial pressure and arterial blood pressure dynamics, and cerebral autoregulation.
3. Hydrocephalus. Studies focus on the pathophysiology of hydrocephalus and alterations in pressure dynamics in hydrocephalus and other brain water disorders. Translational research has been initiated to study molecular-genetic mechanisms of hydrocephalus and diseases involving disorders in brain water homeostasis. Clinical studies focus on outcome of treatment of hydrocephalus. Studies on imaging of CSF circulation.

Ongoing projects

- Pathophysiology by cerebral abscesses
- Pathophysiology of hydrocephalus and abnormal brain pressure
- Pathophysiology of subarachnoid hemorrhage and subdural hematomas
- Outcome of treatment of subarachnoid hemorrhage, vascular compression syndromes, stroke and hydrocephalus
- Bleeding Risks of cerebral aneurysms
- Rehabilitation after subarachnoid hemorrhage
- Diagnostic Imaging by disturbances in the cerebrospinal fluid circulation
- Non-invasive monitoring of intracranial pressure

Most important national and international collaborators

National

- Simula, UiO
- Physical medical dept, OUH
- Dept of Radiology, OUH
- Interventional Centre, OUH
- Dept of Informatics, UiO
- Dept of Mathematics, UiO
- Dept of Neurology, OUH
- Trauma Clinic , OUH
- Sunnaas Rehabilitation Hospital
- Institute of Basic Medical Sciences, UiO

International

- University of Gothenburg, Sweden (Prof. Hansson)

Funding

- South-Eastern Norway Regional Health Authority
- European Union

Scientific production of the research group in 2016

Peer reviewed original research articles: 22

Invited lectures at international congresses:>15

Doctoral dissertations:

Terje Sæhle "Pathophysiology and treatment of hydrocephalus – role of static and pulsatile intracranial pressure" ISBN 978-82-8333-179-0. Dissertation: May 9th 2016.

Selected publications:

Dahlberg D, Ivanovic J, Hassel B: Toxic levels of ammonia in human brain abscess. **J Neurosurg** **124**:854-860, 2016

Eide PK, Sorteberg W: Outcome of Surgery for Idiopathic Normal Pressure Hydrocephalus: Role of Preoperative Static and Pulsatile Intracranial Pressure. **World Neurosurg** **86**:186-193.e181, 2016

Karic T, Roe C, Nordenmark TH, Becker F, Sorteberg A: Impact of early mobilization and rehabilitation on global functional outcome one year after aneurysmal subarachnoid hemorrhage. **J Rehabil Med** **48**:676-682, 2016

Ringstad G, Emblem KE, Eide PK: Phase-contrast magnetic resonance imaging reveals net retrograde aqueductal flow in idiopathic normal pressure hydrocephalus. **J Neurosurg** **124**:1850-1857, 2016



Oslo Neurosurgical Outcome Study Group (ONOSG)



Professor Eirik Helseth, MD/PhD. Consultant neurosurgeon, Dept. of Neurosurgery, Oslo University Hospital and Professor of Neurosurgery, Faculty of Medicine, University of Oslo (eirik.helseth@medisin.uio.no) / OUH (eirik.helseth@ous-hf.no)



Torstein Meling, MD/PhD, Consultant neurosurgeon, Dept of Neurosurgery, Oslo University Hospital (tmeling@ous-hf.no), Associate Professor of Neurosurgery, Faculty of Medicine, University of Oslo and Assistant Professor, Institute of Psychology, University of Oslo (t.r.meling@medisin.uio.no)

Group Members

- Petter Brandal, MD/PhD, OUH
- Bjarne Lied, MD/PhD, OUH
- Tom Børge Johannesen, MD/PhD, OUH
- David Scheie, MD/PhD, Rigshospitalet, Copenhagen, Denmark
- Mads Aarhus, MD/PhD, OUH
- Einar Vik-Mo, MD/PhD, Postdoc, OUH
- Charlotte Halvorsen, MD, PhD fellow, OUH
- Hege Fredø, MD, PhD fellow, OUH
- Markus Wiedmann, MD, PhD fellow, OUH
- Jon-Terje Ramm-Pettersen, MD/PhD, OUH
- Pål Rønning, MD, PhD fellow, OUH
- Benjamin Lassen, MD, PhD fellow, OUH
- Marton König, MD, PhD fellow, Faculty of medicine, UiO
- Ben Heskestad, MD, PhD fellow, Oslofjordklinikken

Research profile and aims

Main focus on surgical complications and outcome after surgery for:

- Intracranial tumors
- Intraspinial tumors
- Outpatient spinal surgery
- Neurotrauma

Ongoing projects

- Intraspinial tumors – Charlotte Halvorsen
- Cervical trauma – Hege Fredø
- Tumor epidemiology – Markus Wiedmann
- Traumatic Brain Injury – Pål Rønning
- Intracranial tumors – Benjamin Lassen



- Skull base tumors - Marton König
- CNS lymphomas – Guro Jahr
- Intraoperative control of resection – Einar Vik-Mo
- Center-TBI (European multicenter study) – Eirik Helseth
- Out-patient spine surgery – Bjarne Lied
- Bicycle neurotrauma – Jon-Terje Ramm-Pettersen
- Traumatic Brain Injury – Ben Heskestad

Funding

South-Eastern Norway Regional Health Authority

Scientific production of the research group in 2016

Peer reviewed original research articles: 16

Invited lectures at international congresses: 20

Selected publications:

Rønning PA, Helseth E, Meling TR, Johannesen TB (2016). The effect of pregnancy on survival in a low-grade glioma cohort. *J Neurosurg*, 125 (2), 393-400

Wiedmann MK, Brunborg C, Di Ieva A, Lindemann K, Johannesen TB, Vatten L, Helseth E, Zwart JA (2016). The impact of body mass index and height on the risk for glioblastoma and other glioma subgroups: a large prospective cohort study. *Neuro Oncol*

König M, Osnes TA, Lobmaier I, Bjerkehagen B, Bruland ØS, Sundby Hall K, Meling TR (2016). Multimodal treatment of craniofacial osteosarcoma with high-grade histology. A single-center experience over 35 years. *Neurosurg Rev*



Vilhelm Magnus Laboratory for Neurosurgical Research



Group Leader

Iver A. Langmoen, MD/PhD, Professor, Dept of Neurosurgery, UiO
(i.a.langmoen@medisin.uio.no) /Dept of Neurosurgery, OUH (UXLAIV@ous-hf.no)

Group Members:

- Cecilie J Sandberg, MSc, PhD, Lab manager/HR/Daily activities, OUH
- Einar O. Vik-Mo, MD, PhD, Deputy group leader, OUH

- Marit Brynjufsen, MSc, PhD-student, UiO
- Artem Fayzullin, MD, PhD-student, UiO
- Zanina Grieg, MSc, OUH
- Kirsten Strømme Kireulf-Vieira, MD, PhD-student, UiO (dissertation February 2017)
- Birthe Mikkelsen, BSc, OUH (leave of absence)
- Awais Mughal, MD, PhD-student, OUH (dissertation March 2017)
- Emily Palmero, BSc, OUH (maternity leave)
- Erlend Skaga, MD, PhD-student, UiO
- Maria Ewa Walewska, MSc, OUH

Research profile and aims

The Vilhelm Magnus Laboratory (VML) is a translational research group for neurosurgery at Oslo University Hospital. We explore the biology underlying neurosurgical conditions. Our research efforts encompass both normal and cancer cells from the human brain. The studies on brain cancer are focused on glioblastoma which is both the most frequent and most deadly brain cancer (median survival in unselected series ≈10 months).

Aims:

- To characterize human brain stem cells and develop cell types for treatment of neurodegenerative disorders
- To characterize glioblastoma stem cells (GSCs)
- To develop therapeutic strategies against GSCs

Ongoing projects

Development of a stem cell-based vaccine in patients with brain cancer:

We participated in the identification of stem cells in glioblastoma. Following this we developed the first clinical protocol that targeted stem cells in solid tumors by transducing dendritic cells from the patients with their own cancer stem cell mRNA. This significantly improved clinical outcome. Almost one out of four of the patients are still alive. These patients have a median survival of 7 years and are still recurrence free. A randomized trial of the vaccine has now been certified by all required authorities. In this study we will use an improved version of the vaccine. Our intention in this study is also to clarify why some patients respond and others do not.

Individualized systems medicine strategy to target GSCs in patients with recurrent glioblastoma:

In collaboration with our partners at the Finnish Institute for Molecular Medicine, we are combining the novel technical possibilities of high-throughput screening and deep sequencing with our established know-how on patient specific tumor stem cell cultures. Exploring a panel of 525 drugs established in clinical use, as well as drugs in early-phase development, we are screening individualized tumor stem cells for drug sensitivity. The approach has been coined Individualized Systems Medicine. The preclinical pipelines along with validation of screening results have been established in 2016. We are preparing to translate the strategy of individualized medicine to patient treatment in 2017.

Coordinated undermining of survival paths with nine repurposed drugs (CUSP9) and temozolomide in patient-derived GBM samples:

A major barrier to effective treatment in glioblastoma is the simultaneous activity of multiple survival and growth-promoting mechanisms. A conceptually new treatment approach has emerged focusing on coordinated blockade of native survival paths of GBM. The coordinated blockade is undertaken by nine clinically well-known and repurposed drugs concomitant with the cytotoxic and standard of care, temozolomide, in a drug cocktail termed CUSP9. We have evaluated the in vitro efficacy of CUSP9 in patient-derived GBM samples using clinical relative drug concentrations across several different experimental cell assays. The coordinated approach has demonstrated a broad efficacy among several patient samples and experimental cell assays, and as the drugs have well-known safety profiles the results are intriguing for translation to patient treatment.

Characterization of invasive GCSs at the single cell level:

Glioblastomas are characterized by diffusely infiltrative growth. To investigate the invasive properties of glioblastoma cells we film cells while they invade into rodent brain slices or 3D-biomatrixes using time-lapse microscopy. We have identified subpopulations of cells with different invasive potentials. These cells display specific movement patterns and morphology. We hypothesize that these cells have diverging activation of signaling pathways and microarray expression analysis show their selective regulation of pathways and genes. We are currently focusing on confirming these findings on a single cell level.

Molecular targeting of cancer stem cells in glioblastoma:

By performing a systematic comparison of gene expression in adult human neural stem cells and GSCs, we have identified differentially expressed genes that may have potential as new and specific targets for treatment of glioblastoma. Our results from exploring

several of these genes and pathways in-depth, suggest a functional role for the Wnt signaling pathway, PBK and NAT12/NAA30 in GBM. As a strategy to more efficiently and directly identify targets that are likely to trigger a therapeutic response, we are currently focusing on genetic high throughput loss-of function screening as tools to identify both individual and shared target hits in patient derived GSC cell cultures.

Most important national and international collaborators

National

- Gunnar Kvalheim, OUH
- Steinar Aamdal, OUH
- Gustav Gaudernack, Targovax
- Stefan Krauss, OUH
- Ola Myklebust, OUH
- Petter Brandal, OUH
- Elsa Lundanes, UiO
- Steven Wilson, UiO

International

- Krister Wennerberg, Markus Perola, Finnish Institute for Molecular Medicine, Finland
- Aki Laakso, Emilia Gaa-Paavola, Töölö Hospital, Helsinki, Finland
- Rainer Glass, LMU, München, Germany
- Krishna Bhat and Frederick Lang, MD Anderson Cancer Center, Houston, USA
- Winston Hide, Harvard University, MA, USA

Funding

- Norwegian Cancer Society
- The Norwegian Research Council
- Norwegian Stemcell Network and CAST
- OUH, Dept of Neurosurgery

Scientific production of the research group in 2016

Peer reviewed original research articles: 3

Selected publications:

Fayzullin A, Tuvnes FA, Skjellegrind HK, Behnan J, Mughal AA, Langmoen IA, Vik-Mo EO.

Time-lapse phenotyping of invasive glioma cells ex vivo reveals subtype-specific movement patterns guided by tumor core signaling. *Exp Cell Res.* 2016 Dec 10;349(2):199-213. doi: 10.1016/j.yexcr.2016.08.001.

Skjellegrind HK, Fayzullin A, Johnsen EO, Eide L, Langmoen IA, Moe MC, Vik-Mo EO.

Short-Term Differentiation of Glioblastoma Stem Cells Induces Hypoxia Tolerance. *Neurochem Res.* 2016 Jul;41(7):1545-58. doi: 10.1007/s11064-016-1868-2.

Kierulf-Vieira KS, Sandberg CJ, Grieg Z, Günther CC, Langmoen IA, Vik-Mo EO. Wnt inhibition is dysregulated in gliomas and its re-establishment inhibits proliferation and tumor sphere formation. *Exp Cell Res.* 2016 Jan 1;340(1):53-61. doi: 10.1016/j.yexcr.2015.12.010.

Movement Disorders



Group Leader

Espen Dietrichs, MD/PhD, Professor and Head of Dept of Neurology, UiO
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Group Members

- Victoria Berge, MD
- Silje Bjercknes, MD
- Kari Anne Bjørnarå, MD PhD (Vestre Viken)
- Marion Ingeborg Boldingh, MD PhD
- Ahmed Elsaï, MD PhD
- Erik Eriksen, MD
- Jan Christian Frich, Prof MD PhD
- Vidar Gundersen, Prof MD PhD
- Sandra Pilar Henriksen
- Morten Andreas Horn, MD PhD
- Zafar Iqbal, PhD
- Emilia Kerty, Prof MD PhD
- Jeanette Koht, MD PhD (Vestre Viken)
- Nadja Anette Myrvik Kvernmo, MD
- Sven Olav Løstegaard
- Angelina Hatløy Maniaol, MD PhD
- Lasse Pihlstrøm, MD
- Trine Haug Popperud, MD
- Aina Rengmark, PhD
- Siri Lynne Rydning, MD
- Inger Marie Skogseid, MD PhD
- Chantal M.E. Tallaksen, Prof MD PhD
- Mathias Toft, MD PhD
- Iselin Marie Wedding, MD PhD
- Margrete Langmyhr

Research profile and aims

Our research aims at mapping the clinical expression, natural progression and treatment of movement disorders and neuromuscular disorders, as well as their causes (genetic disposition, environmental factors, and pathophysiological mechanisms).



Clinical research is performed at both sites of Department of Neurology, i.e. at Rikshospitalet (The National Hospital) and at Ullevål University Hospital. Laboratory research is performed in the Neuroscience Research Unit in our new facilities at Domus Medica IV, close to Rikshospitalet. Our Department is the secondary referral center for all neurology in Oslo (mainly at Ullevål), and the tertiary referral center for neurology in the South-East Health Region of Norway (which includes one half of the Norwegian population). In addition, we have different national functions, including deep brain stimulation (DBS) for movement disorders and other conditions (shared with St. Olav's Hospital).

Ongoing projects

Our research group studies movement disorders and neuromuscular disorders. We have projects with focus on, e.g., Parkinson's Disease, dystonia, tremors, ataxia and other cerebellar diseases, hereditary spastic paraparesis, Huntington's Disease, and myasthenia gravis. These include clinical research as well as laboratory research/translational research.

Most important national and international collaborators

National

- Division of Surgery and Clinical Neuroscience, UiO (Internal collaboration, joint academic and laboratory)
- The other university hospitals in Norway
- Vestre Viken Hospital Trust

International

- FIGHT-MG, a collaboration of leading neurologists and researchers within Myasthenia Gravis research in Europe Sponsored by EU. FP7 Grant 242210
- LUMC, prof J.J.G.M Verschuuren
- P. Bernasconi, Department of Neurology IV, Neuromuscular Diseases and Neuroimmunology, Fondazione Istituto Neurologico «Carlo Besta», Milan, Italy
- COURAGE-PD consortium (consortium studying risk factors for Parkinson's disease, participants from 10 European countries)
- Genetic risk factors for Parkinson's disease in Scandinavia (Umeå, Lübeck/Denmark, Göteborg, Linköping, Bergen/Stavanger)
- GEO-PD (consortium with participants from 25 countries)
- Prof Ole Andreassen, UiO, DemGene - Genetics by Dementia
- European networks for ataxia and hereditary spastic paraparesis (HSP)

Funding

Among others:

- European Union
- The Research Council of Norway
- South-Eastern Norway Regional Health Authority
- Norwegian ExtraFoundation for Health and Rehabilitation





Scientific production of the research group in 2016

Peer reviewed original research articles: 22

Book chapters: 1

Doctoral thesis/PhD: 2

Iselin Marie Wedding: Hereditary spinocerebellar degenerative disorders in Norway. Molecular and clinical studies of ataxia subtypes in a Norwegian patient population. Dissertation 03.03.16

Marion Ingeborg Boldingh: Myasthenia Gravis, Epidemiological and clinical aspects. Dissertation 28.10.16

Selected publications:

Boldingh MI, Maniaol AH, Brunborg C, Weedon-Fekjær H, Verschuuren JJ, Tallaksen CM (2016) Increased risk for clinical onset of myasthenia gravis during the postpartum period *Neurology*, 87 (20), 2139-2145 PubMed 27770065 SFX WOS 000392236100015 (Details)

Pihlstrøm L, Morset KR, Grimstad E, Vitelli V, Toft M (2016) A cumulative genetic risk score predicts progression in Parkinson's disease *Mov Disord*, 31 (4), 487-90 PubMed 26853697 SFX WOS 000374546300007 Cristin 1367426 (Details)

Iqbal Z, Pihlstrøm L, Rengmark A, Henriksen SP, Linder J, Forsgren L, *Toft M*. Rare variants in dementia genes and Parkinson's disease. *Eur J Hum Genet*. 2016 Dec;24(12):1661-1662. doi: 10.1038/ejhg.2016.79.

<<https://www.ncbi.nlm.nih.gov/pubmed/27329738>>

PMID: 27329738



Cerebrovascular Research Group, OUH/UiO



Group Leader

David Russell, Professor, Dept. of Neurology, UiO (david.russell@medisin.uio.no) /
Consultant, OUH (drussell@ous-hf.no)

Group Members

- Christian Lund, MD,PhD, OUH
- Mona Skjelland, MD,PhD, OUH
- Anne Hege Aamodt, MD,PhD, OUH
- Karolina Ryeng Skagen, MD,PhD fellow, OUH
- Mahtab Zamani, MD/PhD fellow
- Azhar Abbas, MD,PhD fellow, OUH
- Kjersti Johnsrud, MD/PhD fellow
- Maren Hysten Ranhoff, MD/PhD fellow
- Henriette Johansen, MD/PhD fellow

Research profile and aims

The main goal is to conduct high-quality cerebrovascular research leading to new knowledge and hopefully better treatment of stroke patients. The research group will promote and facilitate the use of the European Cerebrovascular Research infrastructure (ECRI) for the completion of large national and international stroke studies.

Ongoing projects

- The Unstable Carotid Artery Plaque Study (UCAPS)
- The Norwegian Pediatric stroke Study (NPSS)
- The Norwegian Acute Stroke Prehospital Project (NASPP)
- The Norwegian Atrial Fibrillation and Stroke Study (NAFS)
- The Norwegian Vascular Dementia and Atherosclerosis Study (NVDAS)
- Advanced ultrasound methods for identification of carotid plaque instability
- Oslo Acute Revascularization Stroke Study (OSCAR)
- The Gut bacteria, Atherosclerosis and Ischemic Stroke Study

Most important national and international collaborators

National

- Prof. Lars Thomassen, Haukeland University Hospital
- Norwegian Air Ambulance Foundation (NLA)

International

- Prof. L Csiba, University of Debrecen Medical School, Hungary
- Prof. N Bornstein, Tel Aviv Sourasky University Medical Centre, Israel





Scientific production of the research group in 2016

Peer reviewed original research articles: 11

Doctoral thesis.

Karolina Skagen: Carotid atherosclerosis: imaging and indicators of plaque instability. Dissertation 16.06.16. ISBN 978-82-8333-243-8.

Sean Wallace. Transcranial Doppler; relative blood flow measurements and monitoring during interventional paediatric cardiac catheterisation. UiO 2016. ISBN 978-82-8333-220-9

Funding

- South-Eastern Norway Regional Health Authority
- The Research Council of Norway

Selected publications:

Wallace S, Døhlen G, Holmstrøm H, Lund C, Russell D. Cerebral Microemboli Detection and Differentiation During Transcatheter Closure of Patent Ductus Arteriosus. *Pediatr Cardiol* 2016;37: 1141-7.

Skagen K, Evensen K, Scott H, Krohg-Sørensen K, Vatnehol SA, Hol PK, Skjelland M, Russell D. Semiautomated Magnetic Resonance Imaging Assessment of Carotid Plaque Lipid Content. *J Stroke Cerebrovasc Dis* 2016;25:2004-10.

Evensen K, Aulie HA, Rønning OM, Flatø B, Russell D (2016). Carotid Atherosclerosis in Adult Patients with Persistently Active Juvenile Idiopathic Arthritis Compared with Healthy Controls. *J Rheumatol*. 2016; 43: 810-5.

Skagen K, Trøseid M, Ueland T, Holm S, Abbas A, Gregersen I, Kummen M, Bjerkeli V, Reier-Nilsen F, Russell D, Svardal A, Karlsen TH, Aukrust P, Berge RK, Hov JE, Halvorsen B, Skjelland M (2016). The Carnitine-butYRObetaine-trimethylamine-N-oxide pathway and its association with cardiovascular mortality in patients with carotid atherosclerosis. *Atherosclerosis* 2016; 247: 64-9.

Skarpengland T, Dahl TB, Skjelland M, Scheffler K, de Sousa MM, Gregersen I, Kuśnierczyk A, Sharma A, Slupphaug G, Eide L, Segers FM, Skagen KR, Dahl CP, Russell D, Folkersen L, Krohg-Sørensen K, Holm S, Bjørås M, Aukrust P, Halvorsen B. Enhanced base excision repair capacity in carotid atherosclerosis may protect nuclear DNA but not mitochondrial DNA. *Free Radic Biol Med* 2016; 97: 386-97.



Epilepsy Research Group – Department of Neurology



Group Leader

Erik Taubøll, Professor, Dept. of Neurology, UiO (erik.tauboll@medisin.uio.no) /
OUH (erik.tauboll@ous-hf.no)

Group Members

- Kjell Heuser, Postdoc, OUH
- Agnes Balint Bjørke, PhD fellow, OUH and Vestre Viken Hospital Trust
- Sigrid Svalheim, MD/Ph.D, OUH
- Monika Mokol, PhD fellow, Østfold Hospital Trust
- Dag Aurlien, Consultant, Stavanger Univ Hospital
- Alba Gonzalez; Ph.D. fellow, OUH
- Helle Hermann, PhD fellow, OUH
- Line Sveberg, MD/Ph.D., OUH
- Ketil Berg Olsen, MD, OUH and Østfold Hospital Trust
- Leif Gjerstad, MD/Ph.D. Professor, OUH/UiO, Prof. emeritus

Associated Group Members

- Cecilie Nome, Elective research student, UiO; TLE
- Erlend Nagelhus, MD/Ph.D, Professor, UiO and OUH
- Rune Enger, Elective research student, OUH/UiO
- Bjørnar Hassel, MD/Ph.D, Professor, UiO and OUH

Research profile and aims

The Epilepsy Research Group has been active for more than 20 years. Our research is currently focussed on three main areas:

1) Epilepsy-Translational Research. This focuses on research on temporal lobe epilepsy (TLE) through genetic, basic, and clinical studies. The leader is Kjell Heuser. The main project concerns studying the role of the brain's glial cells in the development and exacerbation of epilepsy (epileptogenesis). The initial studies are basic research using epilepsy models. In addition, larger patient trials are used in which the clinical, radiological (MRI), and neuropsychological development of TLE is monitored over time.

2) “Gender issues”, endocrinology and long-term effects of AEDs. The leader is Sigrid Svalheim. «Gender issues» has been an important area of research for the group over many years, with many PhD theses. The current major focus is studying the long-term side-effects of AEDs on hormones, immunology, haematology and bone health. The group also conducts basic research in collaboration with Jagiellonian University, Krakow, Poland, particularly investigating the effects of AEDs in relation to cancer.

3) Epilepsy and cardiology / SUDEP (sudden unexpected death in epilepsy patients). The leader is Dag Aurlien who is presently based at Stavanger University Hospital. The project is a collaborative venture between Oslo University Hospital (OUH) and Stavanger University Hospital.

In addition to these three main areas of research, the group has also interests in deep brain stimulation (DBS) in epilepsy, ketogenic diets for adults, and status epilepticus.

Ongoing projects

- Can the brain's glial cells be a point of attack for novel AED treatments? This is a major project in which, among other approaches, a mouse model is being used to investigate how epilepsy arises and evolves over time. The main question is how glia cells behave during the development and worsening of epilepsy, and whether these changes can be affected by various drugs such as AEDs, anti-inflammatory drugs, drugs that affect intracellular cell signalling etc. The project was funded by the European Science Foundation until 2014, and we have applied for further national and international funding.
- Is epilepsy a progressive disease? This is a long-term study that focuses on changes in the clinical, radiological and neuropsychological picture in patients with temporal lobe epilepsy. Comprehensive investigations are conducted on patients with newly diagnosed temporal lobe epilepsy at various time points over a 10-year period. The project is supported by Health and Rehab with PhD candidates until 2018.
- Deep brain stimulation (DBS) in epilepsy. In this study patients with hard-to-treat epilepsy are treated with DBS using a blinded study design. This project is being supported by Health and Rehab until 2017.
- Long-term effects of AEDs. Patients starting treatment with the AEDs levetiracetam and lamotrigine will be followed prospectively for two years in terms of immunological, hormonal, and haematological adverse reactions, and possible changes in bone health. The data will be collected through interviews, questionnaires, blood tests, and bone density measurements. This project is supported with a 50 % PhD student from Østfold Hospital.
- Investigation of the possible effects of AEDs, primarily valproate, on cell growth and factors of importance in the development of cancer development. This is a collaborative project together with Jagiellonian University in Krakow, Poland.
- Epilepsy and cardiology. It has become increasingly clear that several epilepsies are channelopathies, as are many cardiac arrhythmias, and are associated with many of the same channels and ions. The relationship between particular generalized epilepsies and cardiac arrhythmias as long QT syndrome (LQTS) will be studied. This is also of central importance for understanding sudden unexpected death in epilepsy (SUDEP). We will also study the impact of several years of epilepsy on cardiac function. This project is supported by The South-Eastern Norway Regional Health Authority with a PhD student from 2015.
- National registration of refractory status epilepticus. We are collating national experiences on how patients with this condition are treated in Norway and how this can be improved. As there are only a few such patients at each centre, joint exchange of experiences is essential. Approval



for an internal quality study was obtained in December 2014 and work on the collection of data commenced in 2015.

Most important national and international collaborators

National

- Dept. of cardiology, OUH
- National Centre for Epilepsy
- Stavanger University Hospital
- Østfold Hospital
- Institute of Basic Medical Science, Glia cells research group (GLIALAB), UiO

International

- Institute of Cellular Neurosciences, Medical Faculty, University of Bonn, Germany (Prof. C. Steinhäuser)
- University of Innsbruck, Austria (Prof. G. Luef)
- Jagiellonian University, Krakow, Poland (Prof. E. Gregoraszcuk)

Funding

- Health and rehab, 2 PhD students
- The South-Eastern Norway Regional Health Authority

Scientific production of the research group in 2016

Peer-reviewed original research articles: 4

Other publications: 4 (+ abstracts)

Invited lectures at international congresses:

Kjell Heuser, invited speaker, 12th European Congress on Epileptology, Praha, September 2016

Erik Taubøll, invited speaker, European Academy of Neurology (EAN), Copenhagen, June 2016

Selected publications:

Kwiecinska P, Taubøll E, Grzyb E, Fiedor E, Ptak A, Gregoraszcuk E. Valproic acid as a promising co-treatment with paclitaxel and doxorubicin in different ovarian carcinoma cell lines. *Int J Gynecol Cancer*. 2016;26 (9): 1546-1556.

Aurlien D, Gjerstad L, Taubøll E. The role of antiepileptic drugs in sudden unexpected death in epilepsy. *Seizure* 2016; 43: 56-60.

Aurlien D, Rath Olsen T, Taubøll E, Gjerstad L, Lossius MI, Nakken KO. Plutselig og uventet epilepsirelatert død. *Tidsskr Nor Laegeforen*. 2016;136(2):131-5.

Shrey DW, Sveberg L. New onset primary generalized epilepsy in adolescence. In: *Controversies in caring for women with epilepsy: sorting through the evidence*. (eds) Sazgar M, Harden CL. Springer, 2016



Multiple Sclerosis (MS)



Group Leader

Hanne Flinstad Harbo, Professor and consultant of Neurology (MD/PhD/MHA), Department of Neurology. Oslo University Hospital (OUH) and Institute of Clinical Medicine, University of Oslo (UiO) (h.f.harbo@medisin.uio.no/uxhahb@ous-hf.no).

Group members

- Hanne Flinstad Harbo, MD/PhD/MHA, Professor, OUH/UiO
- Elisabeth Gulowsen Celius, MD/PhD, Professor, OUH/UiO
- Tone Berge, MSc/PhD, researcher OUH, Ass. prof., Oslo and Akershus University College of Applied Sciences
- Steffan D. Bos-Haugen, MSc/PhD, researcher, UiO
- Pål Berg-Hansen, MD/PhD, engagement ass. professor UiO and consultant OUH
- Gro Owren Nygaard, MD/PhD, OUH
- Sigrid Aune de Rodez Benavent, MD/PhD fellow, Department of Ophthalmology, OUH/UIO
- Piotr Sowa, MD/PhD fellow, Department of Radiology, OUH
- Christian Page, MSci/PhD fellow, UiO (until dissertation November 2016)
- Ingvild Sørnum Leikfoss, MSci/PhD, UiO (maternity leave in 2016)
- Pankaj K. Keshari, MSci/PhD fellow, OUH
- Anna M. Eriksson, MSci/PhD fellow, UiO (maternity leave most of 2016)
- Ina S. Brorson, MSci/PhD fellow, UiO
- Einar August Høgestøl, MD/PhD fellow, UiO
- Cecilia Smith Simonsen, MD/PhD fellow, Drammen Hospital/OUH
- Heidi Øyen Flemmen, MD/PhD fellow, Skien Hospital/OUH
- Fernanda Kropf Correia, BSc, Masterstudent, UiO (MatNat)
- Ingrid Mo, BSc, Masterstudent, UiO (MatNat)
- Åshild Skardhamar, MD /PhD-fellow (application in preparation), OUH

Associated Group Members

- Marte Wendel Gustavsen, MD/PhD, Skien Hospital
- Stine Marit Moen, MD/PhD, MS Rehabilitation Center, Hakadal

We have this year had 6 medical students connected to our group, writing student theses:
Harbo: Helga Bøe Kleiven (submitted 2016), Ellen Trap Eggen and Ingerid Maria Tutturen.
Celius and Berg-Hansen: Inger Bjurstrøm, Victoria Løvstad and Hedda H. Gretland.

Research profile and aims

Multiple Sclerosis (MS) research group at the Department of Neurology, OUH and UiO, aims to identify characteristics and susceptibility factors of MS, and to contribute to a better understanding





of the disease and development of better treatments. We perform genetic, immunological, clinical, epidemiological, environmental, MRI and translational studies of MS in collaboration with national and international research partners and networks.

Ongoing projects

- Gro Owren Nygaard, PhD fellow: A longitudinal cohort study of disability, cognition and MRI in early MS patients in Oslo (Health South East grant held by Harbo). Supervisor: Hanne F. Harbo, Co-supervisors: Elisabeth G. Celius and Kristine Beate Walhovd (dissertation January 2016)
- Christian Page, PhD fellow: Rare Variant Genotyping in Complex Diseases and Identification of Differentially methylated regions (UiO grant held by Harbo). Supervisor: Bettina K. Andreassen, Co-supervisors: Hanne F. Harbo and Benedicte A. Lie (dissertation October 2016)
- Sigrid Aune de Rodez Benavent, PhD fellow: A longitudinal cohort study of ophthalmologic biomarkers correlated with neurodegeneration in early MS. (OUH D-postion Department of Ophthalmology) Supervisor: Elisabeth G. Celius, Co-supervisors: Emilia Kerty, Bruno Laeng and Liv Drosalum
- Tone Berge, researcher: Vitamin D responsive and other MS susceptibility genes. (Health South East grant held by Harbo)
- Steffan Daniel Bos, researcher: Identification of molecular mechanisms and biomarkers of Multiple Sclerosis (MS-biomarkers) – RNA sequencing of CD4+ and CD8+ T cells as potential biomarkers of MS phenotypes. (NFR researcher project grant held by Harbo)
- Piotr Sowa, PhD fellow: MRI biomarkers of disease activity and progression in multiple sclerosis (Health South East grant held by Beyer). Supervisor: Mona Beyer, Co-supervisor: Hanne F. Harbo
- Pankaj K. Keshari, PhD fellow: Immunogenetic loci characterization of multiple sclerosis. (South-Eastern Norway Regional Health Authority grant held bu Harbo). Supervisor: Tone Berge, Co-supervisors: Hanne F. Harbo and Steffan D. Bos
- Anna M. Eriksson, PhD fellow: Identification of molecular mechanisms and biomarkers of Multiple Sclerosis (MS-biomarkers) – molecular characterization of DEXI and other MS susceptibility genes (NFR researcher project grant held by Harbo). Supervisor: Tone Berge, Co-supervisors: Hanne F. Harbo and Steffan D. Bos
- Ina S. Brorson, PhD fellow from 1.12.15 (UiO grant held by Harbo): Defining and characterizing molecular pathways in multiple sclerosis. Supervisor: Steffan Bos, Co-supervisors: Hanne F Harbo and Tone Berge
- Einar August Høgestøl, PhD fellow from 1.12.15: MRI- and other biomarkers in multiple sclerosis. (NFR researcher project grant held by Harbo). Supervisor: Hanne F Harbo, Co supervisor: Lars T Westlye and Gro O Nygaard





- Cecilia Smith Simonsen, PhD fellow (OUH-Drammen grant): Predictors for disease susceptibility and disease progression in Multiple sclerosis, Supervisor: Elisabeth Gulowsen Celius, Co supervisors: Stine Marit Moen and Kari Anne Bjørnerå
- Heidi Øyen Flemmen, PhD fellow (Skien grant): Socioeconomic factors as predictors for disease susceptibility and disease progression in Multiple sclerosis, Supervisor: Elisabeth Gulowsen Celius, Co supervisor: Pål Berg-Hansen. Åshild Skardhamar, MD, PhD fellow: Fatiugue in Multiple Sclerosis. Supervisor: Elisabeth Gulowsen Celius
- Fernanda Kropf Correia (Master project): Molecular characterization of TAGAP- a GTPase-activating protein encoded by a multiple sclerosis susceptibility gene. Supervisor Tone Berge
- Ingrid Mo (Master project): Identifying protein interaction partners for DEXI – encoded by the multiple sclerosis associated dexamethasone-induced gene, DEXI. Supervisor Tone Berge
- Tone Berge, collaboration with Professor Frode Bervem at the University of Bergen; Mass spectrometry analyses of immune cells in multiple sclerosis
- Ingvild Sørum Leikfoss (Senior engineer): CLEC16A and other candidate genes (parental leave most of 2016)
- Hanne F Harbo, Steffan D. Bos, Elisabeth G Celius. MS chip study, collaboration with IMSGC (Harbo Oslo PI)
- Hanne F Harbo, Steffan Bos, Elisabeth G Celius. Exome chip study, collaboration with IMSGC. (Harbo Oslo PI)
- Hanne F Harbo, Steffan Bos, Pål Berg-Hansen, Mona Beyer: BorrSci study, lead from Kristiansand (South-Eastern Norway Multi- Regional Health Authority grant)
- Hanne F Harbo, Steffan Bos, Pål Berg-Hansen, Tone Berge, Ingvild S Leifoss, Elisabeth G Celius Mona Beyer: Multiple MS - partner in EU Horizon 2020-prosjekt (Harbo Oslo PI)
- Hanne F Harbo, Einar A Høgestøl, Sigrid de Rodez Benavent, Steffan Bos, Tone Berge, Elisabeth G Celius, Mona Beyer: Sys4MS- Biotek 2021/NFR Project. (Harbo Oslo PI)
- Einar A Høgestøl, Steffan D. Bos, Hanne F Harbo: MYO Project. Wit Prof Pierre Gourraud, Nantes. NFR support for travel. NFR-Aurora travel grant (Harbo Oslo PI)
- Elisabeth G. Celius, Mona Beyer, Piotr Sowa, Tobias Granberg : Neuroprotective effects of alemtuzumab in patients with MS in a clinical setting
- Cecilia Smith simonsen, Astrid Edland, Elisabeth G. Celius : Effekt av FAMPYRA® på gange, syn, kognisjon, fatigue og vannlating hos pasienter med multiple sklerose
- Elisabeth G. Celius and SINTEF : AutoActive :Tools and Methods for Autonomous Analysis of Human Activities from Wearable Device Sensor Data
- E.G.Celius, P. Berg-Hansen, Kamila Rasova, Prague, Czech republic, Sunnaas, Hakadal MS center, Kysthospitalet Stavern, HiOA :Physiotherapy in the Czech Republic and Norway. Project funded by EU





MS research group OUS-UiO photo summer 2016 at OUS Ullevål:

From left: Elisabeth Gulowsen Celius (consultant of neurology and project leader, MD, PhD), Melanie Van Cauwenberghe (Erasmus Master Student), Ina Skaara Brorson (PhD student, MSc), Fernanda Kropf (Master student), Stine Marit Moen (consultant of neurology, MD, PhD), Pål Berg-Hansen (Ass.professor, PhD and consultant of neurology, MD), Heidi Øyen Flemmen (consultant of neurology, PhD student, MD), Ingrid Mo (Master student), Marte Gustavsen (PhD, MD), Pankaj Kumar Keshari (PhD student, MSc), Piotr Sowa (PhD student, consultant of radiology, MD), Dan Rinker (visiting PhD student from UCLA, MSc), Steffan Daniel Bos (post doc, PhD, MSc), Sigrid A. de Rodez Benavent (consultant of ophtalmology, PhD student, MD), Hanne F. Harbo (professor, consultant of neurology and group leader, MD, MHA, PhD), Einar August Høgestøl (PhD student, MD), Tone Berge (research coordinator and post doc, MSc, PhD).

Funding

- South-Eastern Norway Regional Health Authority
- The Research Council of Norway
- University of Oslo
- European Commission: EU Horizon 2020
- European Commission/The Reserach Council of Norway: Sys4MS - Biotek 2021
- Norwegian Extra Foundation for Health and Rehabilitation
- South-Eastern Norway Multi- Regional Health Authority grant
- Unrestricted research grants from Novartis, Biogen, Genzyme, Odd Fellow, Forsberg and Aulie, and Ingrid and Fritz Nilsen, UNIFOR



Most important national and international collaborators

National

- Mona Beyer, Dept. of Radiology, OUH
- Benedicte A. Lie, Dept. of Medical Genetics, OUH /UiO
- Kristine Walhovd and Anders Fjell, Dept. of Psychology, UiO
- Anne Spurkland, Institute of Basic Medical Sciences, UiO
- Bettina Kulle Andreassen, Cancer Registry, Norway
- Emilia Kerty, Dept. of Neurology, OUH/UiO
- Liv Drolsum, Dept. of Ophthalmology, OUH/UiO
- Ole A. Andreassen, Dept. of Psychiatry, OUH/UiO
- Camilla Stoltenberg, Norwegian Institute of Public Health
- Inger Johanne Bakken, Norwegian Institute of Public Health
- Odd Stokke Gabrielsen, Section for Biochemistry and Molecular Biology, UiO
- Greger Abrahamsen, Division of Anatomy, Molecular Immunology (MOLIMMUN), UiO
- Vibeke Sundvold Gjerstad, Division of Anatomy, Molecular Immunology (MOLIMMUN), UiO
- Trygve Holmøy, Dept. of Neurology, Akershus University Hospital
- Torbjørn Rognes, Section for Biomedical Informatics, Dept. of Informatics, UiO
- Nils Inge Landrø and Bruno Laeng, Dept. of Psychology, UiO
- Ole Landsverk, Dept of Pathology, KLM, OUH
- K.B Nilsen and L. Etholm, Dept. of Neurophysiology, OUH
- Kjell-Morten Myhr and Jan Aarseth, Haukeland University Hospital
- Atle Bjørnerud, Dept. of Physics, Intervention Centre, UiO/OUH
- Frode Berven, Dept. of Biomedicine, University of Bergen
- Lars T. Westlye, Dept. of Psychiatry, OUH
- Rigmor Lundby, Dept. of Radiology, OUH
-

International

- Lisa Barcellos, University of California, Berkeley, US
- Jorge Oksenberg, University of California, San Francisco, US
- Sergio E. Baranzini, University of California, San Francisco, US
- Pablo Villoslada, Hospital Clinic of Barcelona, Spain
- Steve Francis, University of California, San Francisco, US
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- Jan Damoiseaux, Dept. of Neurology, Canisius Wilhelmina Hospital, Nijmegen, the Netherlands
- Joost Smolders, Dept. of Neurology, Canisius Wilhelmina Hospital, Nijmegen, the Netherlands
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- Nordic MS genetics consortium (Hillert, Olsson, Kockum, Oturai, Sørensen, Saareala)
- International MS Genetics Consortium (Adrian Ivinson, Stephen Sawcer, Stephen Hauser, An Goris)
- Helen Tremlett, Dept of Neurology, Vancouver, Canada
- Pierre Antoine Gourraud, Hôpital St-Jacques - CHU de Nantes, France
- Tobias Granberg, Karolinska, Stockholm, Sweden
- Prof. Kamila Rasova, University of Prague, Czech Republic





Scientific production of the research group in 2016

Peer reviewed original research articles: 16

Other publications (abstracts excluded):

Ingvild Sørum Leikfoss. September 2016: *Forståelsen av multippel sklerose-disponerende gener; fra genotype til fenotype*. BestPractice Psykiatri, nevrologi og geriatri.Nr.27/Sep.2016, 7. Årgang

Pål Berg-Hansen. Hvor vanlig er MS i Norge? BestPractice Psykiatri, nevrologi og geriatri.Nr.26/April 2016, 7. Årgang

Elisabeth Gulowsen Celius: Rebound ved seponering av MS behandling. BestPractice Psykiatri, nevrologi og geriatri.Nr.25/Januar 2016, 7. Årgang

Hanne F Harbo og Anne Hege Aamodt: Bruk hjernen! Blogg Forskningssykehuset, June 2016

Hanne F Harbo og Anne-Grethe Strøm-Erichsen: Norge må satse mer på hjernehelse. Kronikk Dagens Medisin, August 2016 og i Fædrelandsvennen, August 2016.

Invited lectures at international congresses:

Elisabeth G. Celius: Long term prognosis in multiple sclerosis – a 25 year follow-up.International MS Cognition Society, New York, June 2016.

Hanne F Harbo: Mapping of MS Genetic Risk Factors in MS. European association of MS societies (EMSP). May 18th 2016

Doctoral dissertations:

Gro Owren Nygaard 27. Jan. 2016: Cognition, disease activity and MRI changes in early multiple sclerosis. Main supervisor: Hanne F Harbo. Co-supervisors: Kristine Walhovd, Elisabeth G Celius.

Christian Page 21. Nov. 2016: DNA Methylation and Exome Chip Analysis in Complex Disease. Main supervisor: Bettina K. Andreassen. Co-supervisor: Hanne Flinstad Harbo

Selected publications:

Berge T, Leikfoss IS, Brorson IS, Bos SD, Page CM, Gustavsen MW, et al. The multiple sclerosis susceptibility genes TAGAP and IL2RA are regulated by vitamin D in CD4+ T cells. *Genes Immun.* 2016;17(2):118-27.

Simonsen CS, Celius EG, Brunborg C, Tallaksen C, Eriksen EF, Holmoy T, et al. Bone mineral density in patients with multiple sclerosis, hereditary ataxia or hereditary spastic paraplegia after at least 10 years of disease - a case control study. *BMC Neurol.* 2016;16(1):252.

Keshari PK, Harbo HF, Myhr KM, Aarseth JH, Bos SD, Berge T. Allelic imbalance of multiple sclerosis susceptibility genes IKZF3 and IQGAP1 in human peripheral blood. *BMC Genet.* 2016;17:59



Pain Conditions



Group Leader

John-Anker Zwart, Professor, Dept. of Neurology, Head of Research, Division of Clinical Neuroscience, UiO (j.a.zwart@medisin.uio.no) / OUH (uxzwjo@ous-hf.no)

Group Members

- Ellen Jørum, Professor, UiO/OUH
- Britt Andenes, MD/PhD fellow, UiO
- Evy Berntsen, administrative, OUH
- Olaf Fjeld, MD/PhD fellow, UiO/OUH
- Håvard Furunes, MD/PhD fellow, UiO
- Margreth Grotle, Professor, OUH/HioA
- Maren Hjelle Guddal, Msc/PhD fellow, UiO
- Alf Inge Hellevik, MD/PhD fellow, OUH/NTNU
- Ingrid Heuch, MD/senior researcher, OUH
- Synne Øien Stensland, MD/ Postdoctoral fellow, OUH
- Marianne Bakke Johnsen, Msc/PhD fellow,UiO
- Kristin Ørstavik, MD, PhD, senior consultant, OUS
- Inge Petter Kleggetveit, MD/Postdoctoral fellow, OUH
- Synnøve Kvalheim, MD/PhD fellow, UiO
- Ida Løchting, Msc/PhD fellow, UiO
- Kristian Bernhard Nilsen, MD/associate Professor, OUH
- Linda M. Pedersen, Msc/Postoctoral fellow, OUH
- Vibeke Siewers, research coordinator, OUS
- Kjersti Storheim, PhD/Associate Professor, UiO/OUH
- Jarle Sundseth, MD/PhD fellow, UiO/OUS
- Markus Wiedmann, MD/PhD fellow, UiO/OUH
- Monica Wigemyr, Msc/research coordinator, OUH
- Bendik Winsvold, MD/Postdoctoral fellow, OUH
- Lars Christian Haugli Bråten, MD/PhD fellow, UiO/OUS
- Maria Dehli Vigeland, Msc/PhD fellow, UiO/OUH
- Sigrid Børte, MD/PhD fellow, UiO/OUH
- Ingrid Fjeldheim Bånerud, Msc/research coordinator, OUH
- Amy Mitchell, Msc/research coordinator, OUH
- Marie Udneseter Lie, Msc/research ccordiantor, OUH
- Espen Saxhaug Kristoffersen, MD/PhD, associate professor
- Elena Petriu, PT / Master student

Research profile and aims

The main focus of the research group is to generate research based knowledge on mechanisms, prevention and treatment of pain in the musculoskeletal- and nervous system.

Ongoing projects

- The Acute Low-Back Pain Study. Clinical, neurophysiological and genetic risk factors
- Genetic risk variants in migraine and cardiovascular disease. The Gene HUNT study
- Vitamin D and risk factors for chronic back pain – a prospective epidemiological survey
- Risk factors for anterior cruciate ligament injuries in Norwegian adolescents and young adults: (the ACL/HUNT studies)
- Genetic and environmental causes of migraine, a large-scale family-based analysis
- Early risk factors for migraine. The young-HUNT study
- Familiar hemiplegic migraine in Norway
- The AIM-study (Antibiotics In Modis changes); antibiotic treatment of chronic low-back pain with Modis changes, a randomised double blind multicenter placebo controlled trial
- The HUNT OsteoArthritis study (the HOA-study)
- Lumbar disc prosthesis versus multidisciplinary rehabilitation in chronic back pain and localized degenerative disc. Long term follow-up of a randomized multicentre trial
- The NORwegian Degenerative spinal STENosis-trial (the NORDSTEN-study)
- Physical activity and sport participation during adolescence and musculoskeletal complaints in adulthood. A population based cohort study
- The COPE-study (Cognitive patient education in primary care)
- Spinal surgery in Norway. Trends, costs and regional differences
- The Norwegian Cervical Arthroplasty Trial. The NORCAT study. A prospective, single blinded, randomized, controlled multicenter study
- Risk factors for development of chronic pain after hospitalization for acute low back pain and/or sciatica (RUKSAR)
- Clinical and genetic aspects of neuropathic pain (ClINGNeuP)
- Conditioned pain modulation with respect to different test pain stimuli (CPM2TS)
- Physical activity, chronic low back pain and other musculoskeletal complaints, is there a causal relationship? The HUNT study
- Childbirths, hormonal factors and low back pain - a prospective epidemiological survey
- A Comparison of Anthropometric Measures for Assessing the Association between Body Size and Risk of Chronic Low Back Pain: The HUNT Study
- Back Pain in Elderly (BACE). A prospective cohort study of older people visiting primary care with a new episode of back pain
- Genetic risk factors for development of Pain – The Tromsø Study
- All-In-HUNT, genetic assessment of neurological and psychiatric disorders



Most important national and international collaborators

National

- University Hospital of North Norway (UNN)
- Drammen Hospital
- St.Olavs Hospital/Trondheim University Hospital
- Østfold Hospital
- Haukeland University Hospital
- The National Institute of Occupational Health (STAMI)
- Norwegian University of Science and Technology (NTNU)
- Oslo and Akershus University College (HiOA)

International

- Leiden University Medical Centre (LUMC), the Netherlands
- Broad Institute of MIT and Harvard, Boston, US
- Institute for Molecular Medicine (FIMM), Finland
- University of Helsinki, Finland
- Keele University, UK
- University of Odense, Denmark
- The low-back pain consortium
- The headache genetics consortium

Scientific production of the research group in 2016

Peer reviewed original research articles: 26

PhD 2016:

- Brit Andenes Blaauw: *“Primary recurrent headaches among adolescents - Prevalence and risk factors”* - dissertation 12 februar 2016
- Synnøve Kvalheim: *“Potential risk factors for chronic musculoskeletal complaints in a general population. The HUNT-study”* – dissertation 30 september 2016

Master thesis:

- Marie Udnesseter Lie: Comparing conditioned pain modulation effects using different test stimuli - An experimental crossover study in healthy adults
- Henrik Borchrevink-Lund, Characterization of hospital inpatients with low back pain and radiculopathy. A prospective cohort study of patients undergoing conservative treatment at the Department of Neurology, Oslo University Hospital
- Ørjan Nesse Vigdal: With what level of accuracy can we predict persistent disability in sciatica patients using self-reported screening tools? Predictive validity of STarT Back Screening Tool and Örebro Musculoskeletal Pain Questionnaire in patients with sciatica in secondary care: A prospective cohort study with 12 month follow-up





Selected publications:

Gormley P, Anttila V, Winsvold BS, et al. (2016). Meta-analysis of 375,000 individuals identifies 38 susceptibility loci for migraine. *Nat Genet*, 48 (8), 856-66.

Kleggetveit IP, Schmidt R, Namer B, Salter H, Helås T, Schmelz M, Jørum E (2016)
Pathological nociceptors in two patients with erythromelalgia-like symptoms and rare genetic Nav 1.9 variants. *Brain Behav*, 6 (10), e00528

Fjeld, OR, Grotle M, Siewers V et al. Prognostic factors for persistent leg-pain in patients hospitalized with acute sciatica. *Spine* 2016 ;Volum 42.(5) s. E272-E279

Funding

- South-Eastern Norway Regional Health Authority
- The Research Council of Norway
- The Norwegian Fund for Post-Graduate Training in Physiotherapy
- UiO
- OUH



Brain plasticity and neuropsychiatry



Group Leader

Torbjørn Elvsåshagen; M.D., PhD., postdoctoral research fellow; Department of Neurology, OUH (telvsaha@ous-hf.no) and Norwegian Centre for Mental Disorders Research (NORMENT), UiO (torbjorn.elvsashagen@medisin.uio.no)

Group Members

- Erlend Bøen; M.D., Ph.D.; Diakonhjemmet Hospital
- Britta Bürker; M.D., Ph.D. research fellow; OUH/University of Oslo (UiO)
- Guro Dunvoll; M.Sc., Ph.D. research fellow; OUH/UiO/Oslo and Akershus University College of Applied Sciences
- Torfinn Hynnekleiv; M.D.; OUH and Innlandet Hospital Trust
- Katalin Juhasz; M.D.; Akershus University Hospital
- Eva A. Malt; M.D., Ph.D., Assoc. professor; Inst. of Clinical Medicine, UiO
- Ulrik F. Malt; M.D., Ph.D., Professor emeritus; Inst. of Clinical Medicine, UiO
- Karl Ludvig Reichelt; M.D., Ph.D.; professor emeritus†
- Torunn Søyseth; M.Sc., OUH
- Nathalia Zak; M.D., Ph.D. research fellow; OUH/UiO

Associated Group Members

- Stein Andersson; Ph.D., Professor; Dept. of Psychology, UiO
- Birgitte Boye; M.D., Ph.D., Professor; Inst. of Basic Medical Sciences, UiO
- Torgeir Moberget; Ph.D., postdoctoral research fellow; OUH

†Deceased 29.10.2016

Research profile and aims

Our group conducts research in the fields of adult brain plasticity and neuropsychiatry. Plasticity – the capacity for change – is increasingly recognized as an intrinsic property of the adult brain and may play important roles in the etiologies and treatments of neurological and psychiatric illnesses. Neuropsychiatry recognizes that the brain and mind are one, that mental illnesses are disorders of the brain, and that psychiatric symptoms are commonly found in neurological disorders. One important goal of neuropsychiatric research is to bridge the gap between neurology and psychiatry.

Among the main aims of our current research are:

1. To examine whether structural and functional brain plasticity are core characteristics of the human sleep-wake cycle
2. To increase our understanding of how novel schizophrenia- and bipolar disorder-associated genetic variants affect synaptic plasticity
3. To investigate whether adult hippocampal neurogenesis can be measured using magnetic resonance spectroscopy (MRS)

Ongoing projects

- Sleep-wake-dependent brain plasticity in health and depression
- Genes, synaptic function, and stem cells in bipolar disorder, schizophrenia, and autism spectrum disorder: from pathophysiology towards personalized medicine
- *In vivo* measurements of adult hippocampal neurogenesis using MRS
- Brain plasticity and psychobiology in bipolar II disorder and borderline personality disorder
- G-protein genotypes and associations with anxiety and depression in the HUNT Study
- Studies of genotype-phenotype interactions in the 3q29 microdeletion syndrome
- Neuropsychiatry and coping in heart and lung transplantation
- Non-invasive human LTP-like plasticity – examining robustness, functional significance and clinical utility of a novel biomarker
- Mapping and modulating brain networks in severe mental illness: towards new targets for therapeutic non-invasive brain stimulation

Most important national and international collaborators

National

- Prof. Ole A. Andreassen, NORMENT, UiO/OUH
- Prof. Erik Jönsson, NORMENT, UiO
- Prof. Srdjan Djurovic, NORMENT, UiO
- Ass. prof. Lars T. Westlye NORMENT, UiO
- Prof. Bjørn Bjorvatn, Norwegian Competence Center for Sleep Disorders, Bergen
- Dr. Stine Knudsen, C. of Exp. For Neurodevelopmental Disorders and Hypersomnias, OUH
- Prof. Atle Bjørnerud, Dept. of Physics, OUH/ UiO
- Prof. Espen Dietrichs, Dept. of Neurology, OUH/UiO
- Prof. Guttorm Haugen, Dept. of Obstetrics and Gynecology, OUH/UiO
- Prof. Ragnhild Emblem Dept. of Pediatric Surgery, OUH/UiO
- Prof. Sigmund Karterud, Dept. for Personality Psychiatry, OUH/UiO
- Prof. Lars Gullestad, Dept. of Cardiovascular Medicine, OUH/UiO
- NORBRAIN group
- Prof. Hilde Nilsen, Dept. of Molecular Biology (EpiGen), UiO
- Prof. Jan Ivar Røssberg, OUS/UiO
- Prof. Gaute Einevoll, NMBU/UiO

International

- Ass. prof Ana Andreatza, Dept. of Psychiatry, University of Toronto, Canada
- Prof. and Chair Trevor Young, Dept. of Psychiatry, University of Toronto, Canada
- Prof. Eus van Someren, Netherland's Institute for Neurscience, Amsterdam, the Netherlands
- Ass. prof. Mirjana Maletic-Savatic, Baylor College of Medicine, Houston, USA
- ENIGMA group (Enhancing NeuroImaging Genetics through Meta-Analysis)
- EURONET-SOMA: European Research Network on somatoform disorders; group leader: Prof. Bernd Löwe, Uni Hamburg-Eppendorf, Abt. Für Psychotherapie und Psychosomatische Medizin, Germany



Funding

- South-Eastern Norway Regional Health Authority
- Norwegian Competence Center for Sleep Disorders
- Oslo University Hospital
- Throne-Holst foundation
- Ebbe Frøland foundation

Scientific production of the research group in 2016

Peer reviewed original research articles: 16

Invited lectures at international congresses:

U.F. Malt. Psychiatric disorders and psychological distress in patients undergoing evaluation for lung transplantation: a national cohort study. The European Association of Psychosomatic Medicines, Annual meeting, Luleå, 17.6.2016

T. Elvsåshagen. Synaptic plasticity and neurogenesis in the adult brain: implications for understanding and treating neuropsychiatric and psychosomatic disorders. EAPM, Annual meeting, Luleå, 18.6.2016

Research grants:

South-Eastern Norway Regional Health Authority. *Genes, synaptic function, and stem cells in severe mental illnesses: from pathophysiology towards personalized medicine*, ~3.1MNOK, **PI: T. Elvsåshagen**

South-Eastern Norway Regional Health Authority. *Sleep-wake-dependent brain plasticity in health and depression*, ~3.2MNOK, PI: A. Bjørnerud; **CO-PI: U.F. Malt**

Norwegian Competence Center for Sleep Disorders. *Diurnal variability and the effect of sleep deprivation on deep brain nuclei blood flow and structure*, 100KNOK, **PI: T. Elvsåshagen**

Selected publications:

Hibar DP, et al. Subcortical volumetric abnormalities in bipolar disorder. **Mol Psychiatry**. 2016; 21(12):1710-1716.

Kaufmann T, et al. The brain functional connectome is robustly altered by lack of sleep. **Neuroimage**. 2016; 127:324-32.

Elvsåshagen T, et al. Dentate gyrus-cornu ammonis (CA) 4 volume is decreased and associated with depressive episodes and lipid peroxidation in bipolar II disorder: Longitudinal and cross-sectional analyses. **Bipolar Disord**. 2016 Dec;18(8):657-668.



Psycho-neuro-endocrinology. Sex on Brain European



Research (SOBER)

Group Leader

Ira Ronit Hebold Haraldsen, MD/PhD, Psychiatrist, OUH (i.haraldse@ous-hf.no)

Group Members

- Ana Perez, Psychologist, OUH
- Anne-Line Sommerdalen, MD, OUH
- Syed Nuruddin, VetMD, OUH
- Slawomir Wojniusz, Physiotherapist, OUH
- Uyen Pham, MD, OUH
- Britta Bürker, MD, OUH
- Aksel Erichsen, MD, OUH
- Patrick Riss Chemist OUH/UiO
- Stefan Sütterlin, Psychologist, OUH

Research profile and aims

The OPTImist-SOBER (Sex on Brain European Research group) is an established research group in neuroendocrinology, focusing on the time correlated phenomenons of pruning and increasing GnRHR expression in sex specific neural network development during sensitive periods, like pre-postnatal, during puberty and ageing. Because of our direct hands on experiences in basic science, from microbiological, immunohistochemistry methods to PET/radiochemistry, we wish to bridge the gap from classical molecular biology to cognitive science.

Furthermore, we are focusing on sex-specific receptor visualization for PET diagnostics and sex-specific ageing processes in Alzheimer Disease models.

Although the research group intends to keep the same research focus moving forward, the group has made plans to change its name from the OPTImist-SOBER group to the Center for Clinical Neuroscience (CCN) in 2017. These changes are due to the reorganization of the Department of Neuropsychiatry and Psychosomatic Medicine at OUH.



Ongoing projects

- Development of a Novel F18-PET tracer for early diagnosis of Alzheimer Dementia
- Mood and Cognitive Outcome after Heart Transplantation (the MOODHEART study)
- Novel risk factor assay for Alzheimer's disease-Multi-parametric quantification of HPG/HPT-axis dysfunction
- Effect of puberty delaying treatment on the child's cognitive style
- Hormones and brain development. Impact of Gonadotropin Releasing Hormone blockade and steroid hormones on brain development through puberty and adolescence
- Effectiveness of somatocognitive therapy for the treatment of provoked localized vestibulodynia (the Pro-LoVe study)

Most important national and international collaborators

National

- Mahmood Reza Amiry Moghaddam, UiO
- Tor Endestad, UiO
- Jo Klaveness, UiO
- Dag Erlend Olberg, NMS-Pet Centre
- Erik Ropstad, Norwegian School of Veterinary Science (NVH)
- Anne-Kristin Solbakk, OUH
- Reidun Torp, UiO
- Thomas Schreiner, OUH
- Per Magnus, FHI
- Thor Audun Saga, NMS
- Jan Solberg, Inven2

International

- Neil Evans, Glasgow, Scotland
- Jane Robinson, Glasgow, Scotland
- Els Elaut, Belgium
- Griet De Cuypere, Belgium
- Guy T'Sjoen, Belgium
- Susanne Cerwenka, Germany
- Timo O. Nieder, Germany
- Hertha Richter-Appelt, The Netherlands
- Peggy Cohen-Kettenis, The Netherlands
- Walter Bockting, New York, USA

Funding

- The Research Council of Norway – The Research Programme on Biotechnology for Innovation (BIOTEK 2021)
- South-Eastern Norway Regional Health Authority
- Throne Holst foundation





Scientific production of the research group in 2016

Peer reviewed original research articles: 18

Selected publications:

van de Grift TC, Cohen-Kettenis PT, Elaut E, De Cuypere G, Richter-Appelt H, Haraldsen IR, Kreukels BP A network analysis of body satisfaction of people with gender dysphoria.

Body Image **2016** Jun;17():184-90. Epub 2016 apr 30

PMID:27137814

Schneider C, Cerwenka S, Nieder TO, Briken P, Cohen-Kettenis PT, De Cuypere G, Haraldsen IR, Kreukels BP, Richter-Appelt H

Measuring Gender Dysphoria: A Multicenter Examination and Comparison of the Utrecht Gender Dysphoria Scale and the Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults. Arch Sex Behav **2016** Apr;45(3):551-8. Epub 2016 feb 16

PMID: 26883025

van de Grift TC, Cohen-Kettenis PT, Steensma TD, De Cuypere G, Richter-Appelt H, Haraldsen IR, Dikmans RE, Cerwenka SC, Kreukels BP

Body Satisfaction and Physical Appearance in Gender Dysphoria.

Arch Sex Behav **2016** Apr;45(3):575-85. Epub 2015 okt 16

PMID: 26474976

Becker I, Nieder TO, Cerwenka S, Briken P, Kreukels BP, Cohen-Kettenis PT, Cuypere G, Haraldsen IR, Richter-Appelt H

Body Image in Young Gender Dysphoric Adults: A European Multi-Center Study.

Arch Sex Behav **2016** Apr;45(3):559-74. Epub 2015 apr 3

PMID: 25836027

Hough D, Bellingham M, Haraldsen IR, McLaughlin M, Robinson JE, Solbakk AK, Evans NP

A reduction in long-term spatial memory persists after discontinuation of peripubertal GnRH agonist treatment in sheep. Psychoneuroendocrinology **2016** Nov 30;77():1-8. Epub 2016 nov 30

PMID: 27987429

Olberg DE, Bauer N, Andressen KW, Hjørnevik T, Cumming P, Levy FO, Klaveness J, Haraldsen I, Sutcliffe JL

Brain penetrant small molecule (18)F-GnRH receptor (GnRH-R) antagonists: Synthesis and preliminary positron emission tomography imaging in rats.

Nucl Med Biol **2016** Aug;43(8):478-89. Epub 2016 mai 10

PMID: 27236283

Wojniusz S, Callens N, Sütterlin S, Andersson S, De Schepper J, Gies I, Vanbesien J, De Waele K, Van Aken S, Craen M, Vögele C, Cools M, Haraldsen IR

Cognitive, Emotional, and Psychosocial Functioning of Girls Treated with Pharmacological Puberty Blockage for Idiopathic Central Precocious Puberty. Front Psychol **2016**;7():1053. Epub 2016 jul

PMID: 27462292



Neurohabilitation



Group Leader

Bjørnar Hassel, Professor, Dept. of Neurohabilitation, OUH
(bjornar.hassel@ous-hf.no) and UiO (bjornar.hassel@medisin.uio.no)

Group Members

- Nils Olav Aanonsen, MD, OUH
- Sigrun Hope, MD, PhD, OUH
- Anne Katrin T. Holmøy, MD, OUH
- Kathrine Haggag, MD, OUS
- Jutta Rummel, MD, OUS
- Alma Sikiric, MD, OUS
- Helene Portilla, MD, OUS
- Daniel Dahlberg, MD, OUS
- Amalie Poole, Stud. med.
- Marleen van Walsem, PhD, OUS

Research profile and aims

The aim of the neurohabilitation research group is 1) to conduct research that will lead to improvement of the quality of life of persons with developmental disabilities, 2) to investigate mechanisms behind brain dysfunction and damage that leads to developmental disability.

In collaboration with the municipality of Oslo, SINTEF, and The University College of Oslo and Akershus we investigate the use of sensors for autonomic responses as a means of communication for developmentally disabled persons who are unable to express their needs.

To investigate mechanisms that underlie some forms of developmental disability we use clinical and preclinical approaches to elucidate mechanisms of toxicity of certain metabolites and microbes.

Ongoing projects

- Wearable sensors for autonomic responses as a means of communication for persons with developmental disability who lack the ability to express themselves
- Mechanisms of seizure generation and cell death during brain abscess formation, a preventable cause of developmental disability
- Mechanisms of cell death and seizure generation during formation of cystic brain tumors
- The effects on brain cells of propionic acid, a metabolite that causes cerebral dysfunction in an inborn error of metabolism
- The metabolism of fructose and its metabolite glyceraldehyde, two causes of neurodegeneration through formation of advanced glycation end products

Most important national and international collaborators

National

- Cecilie Morland, HIOA/Inst. of Pharmacy, UiO
- Frode Strisland, SINTEF – Smart sensor systems, Oslo
- Oslo Municipality and the burroughs of Nordstrand, Østensjø and Vestre Aker
- Erik Taubøll, Dept. of Neurology, UiO
- Farrukh A. Chaudhry, Inst. of Anatomy, UiO
- Torgeir Bruun Wyller, Dept. of Geriatrics, OUH
- Leiv Otto Watne, Dept. of Geriatrics, OUH
- Nenad Bogdanovic, Dept. of Geriatrics, OUH
- Espen Mariussen, Norwegian Defence Research Establishment, Kjeller
- Øyvind Voie, Norwegian Defence Research Establishment, Kjeller
- Frode Rise, Inst. of Chemistry, UiO

International

- Farshid Amirabdollahian, University of Hertfordshire, UK
- Sergio Guillen, Mysphera, TSB Real time location systems, Valencia, Spain
- Jordi Rovirasimon, Parc Sanitari Sant Joan de Deu, Barcelona, Spain
- Raymond Dingedine, Emory University, Atlanta, GA, USA

Scientific production of the research group in 2016

Peer reviewed original research articles: 9

Other Publications: 2

Selected publications:

Dahlberg D, Ivanovic J, Hassel B. Toxic levels of ammonia in human brain abscess. *J Neurosurg.* 2016;124:854-860.

Watne LO, Idland AV, Fekkes D, Raeder J, Frihagen F, Ranhoff AH, Chaudhry FA, Engedal K, Wyller TB, Hassel B. Increased CSF levels of aromatic amino acids in hip fracture patients with delirium suggests higher monoaminergic activity. *BMC Geriatr.* 2016;16:149.

Morland C, Pettersen MN, Hassel B. Hyperosmolar sodium chloride is toxic to cultured neurons and causes reduction of glucose metabolism and ATP levels, an increase in glutamate uptake, and a reduction in cytosolic calcium. *Neurotoxicology* 2016;54:34-43.

Specialized medical rehabilitation – Sunnaas Rehabilitation Hospital



Group Leader

Johan K. Stanghelle, MD/PhD, Director of Research (johan.stanghelle@sunnaas.no)/
Professor, Dept. of Physical Medicine and Rehabilitation, UiO
(j.k.stanghelle@medisin.uio.no)

Group Members

- Johan K. Stanghelle, MD/PhD, Professor, Sunnaas Rehabilitation Hospital/UiO
- Frank Becker, MD/PhD, ass Professor, Sunnaas Rehabilitation Hospital/UiO
- Grethe Månnum, MD/PhD, ass Professor, Sunnaas Rehabilitation Hospital/UiO
- Emil Kostovski, MD/PhD, postdoc fellow, Sunnaas Rehabilitation Hospital/UiO
- Svend Rand-Hendriksen, MD/PhD, postdoc fellow, Sunnaas Rehabilitation Hospital/UiO
- Anne-Kristine Schanke, PSYCH/PhD, Professor, Sunnaas Rehabilitation Hospital/UiO
- Marianne Løvstad, PSYCH/PhD, ass Professor, Sunnaas Rehabilitation Hospital/UiO
- Solrun Sigurdardottir, PSYCH/PhD, postdoc fellow, Sunnaas Rehabilitation Hospital
- Jan Egil Nordvik, PSYCH/PhD, Sunnaas Rehabilitation Hospital
- Arve I. Opheim, PT/PhD, Sunnaas Rehabilitation Hospital
- Vivien Jørgensen, PT/PhD, Sunnaas Rehabilitation Hospital
- Ellen Høyer, PT/PhD, Sunnaas Rehabilitation Hospital
- Anne Lannem, PT/PhD, ass Professor, Sunnaas Rehabilitation Hospital/Norwegian school of Sport Sciences
- Kirsti Skavberg Roaldsen, PT/PhD, ass Professor, Sunnaas Rehabilitation Hospital/Oslo and Akershus University College of Applied Sciences/Karolinska Institute
- Birgitta Langhammer, PT/PhD, Professor, Sunnaas Rehabilitation Hospital/Oslo and Akershus University College of Applied Sciences
- Ellen Berg Svendby, Cand Scient/PhD, Sunnaas Rehabilitation Hospital/Oslo and Akershus University College of Applied Sciences
- Grace I. Romsland, RN/PhD, Professor, Sunnaas Rehabilitation Hospital/Oslo and Akershus University College of Applied Sciences
- Melanie Kirmess, ST/PhD, ass Professor, Sunnaas Rehabilitation Hospital/UiO
- Vegard Strøm, Cand Scient/PhD, Sunnaas Rehabilitation Hospital

Associated group members:

- Fin Biering-Sørensen, MD/PhD, Professor, Copenhagen University
- Katharina Sunnerhagen, MD/PhD, Professor, Gothenburg University
- Lena Hartelius, ST/PhD, Professor, Gothenburg University
- Kerstin Fugl-Meyer, SW/PhD, Professor, Karolinska Institute
- Anna Olsson, SW/PhD, Professor, Karolinska Institute
- Agneta Ståhle, PT/PhD, Professor, Karolinska Institute
- Helle Ploug Hansen, RN/PhD, Professor, University of Southern Denmark, Odense
- Jennie Ponsford, PSYCH/PhD, Professor, Monash University, Melbourne



Associated group members (continued):

PhD Fellows/MD: Dag Brekke, Thy Thy Vanem, Ingebjørg Irgens, Erlend Solberg Dørum, Hege Prag Øra, Claudia Nyberg, Vesna Miloshevska Jakimovska, Mladen Savikj

PhD Fellows/PSYCH: Per Ola Rike, Kjersti Mæhlum Walle, Sveinung Tornås, Solveig Hauger, Geneviève Ricard, Knut Kolskår

PhD Fellows/RN: Anne-Stine Røberg, Anne Geard

PhD Fellows/PT: Emelie Butler Forslund, Matthijs Wouda, Linda Rennie, Anu Piira

PhD Fellows/SW: Gry Velvin, Jannike K. Vikan

PhD Fellows/ST: Maribeth C. Rivelsrud

PhD Fellows/OT: Anne-Marthe Sanders

Administration:

Annette M. Juelsen

Research profile and aims

Clinical and some basic research within specialized rehabilitation of patients with brain injuries, spinal cord injuries and multitrauma, and research within selected groups of seldom diagnosis.

Ongoing projects

- Follow-up of the most serious injured patients after the July 22nd attack
- Multinational studies on specialized rehabilitation for stroke patients and spinal cord injuries
- Several studies on neuropsychological consequences after brain injury
- Several studies on movement disorders and gait analysis
- Basic physiological mechanisms after spinal cord injuries
- Basic mechanisms after brain injuries (fMRI, electrophysiological functions etc)
- Several studies on patients with seldom diagnosis

Most important national and international collaborators

National

- Oslo University Hospital
- Institute of Psychology, UiO
- Oslo and Akershus University College
- Norwegian Sport High School
- Haukeland University Hospital
- St. Olav Hospital / Trondheim University Hospital
- University Hospital of North Norway
- Beitostølen Health Sport Center
- Hospitals in Health Region South-East

International

- Karolinska Institute, Stockholm, Sweden
- Gothenburg University, Sweden
- Copenhagen University, Denmark
- University of Southern Denmark, Odense; Denmark
- Monash University, Melbourne, Australia
- China Rehabilitation and Research Center (CRRC), China
- Rusk Institute of Rehabilitation , NY, USA
- Policlinic no2, Petrozavodsk, Karelia,



Russian Federation

- Sheba Medical Center, Tel Aviv, Israel
- Betlehem Arab Society for Rehabilitation, Palestine (BASR)
- El Wafa Hospital, Gaza, Palestine
- Sahlgrenska University Hospital, Högsbo, Sweden
- Bayi 81 Rehabilitation Center, Sichuan, China
- Schweizer Paraplegiker-Forschung AG, Switzerland

Scientific production of the research group in 2016

Peer reviewed original research articles: 43

Other Publications: 40

Doctoral thesis:

Johansson, Annica E.M.; Changes in occupational patterns after disability

Jørgensen, Vivien; Falls in ambulatory individuals with spinal cord injury

Velvin, Gry; Psychosocial aspects of adults with Marfan Syndrome

Rike, Per-Ola; Critical factors for safe driving after an acquired brain injury

Selected publications:

Health and social conditions in Norwegian polio survivors: A 20-year follow-up study.

Festvåg L, Schanke AK, Gilhus NE, Aarrestad S, Lofthus K, Johnsen S, Strømsholm G, Øyhaugen S, Hartviksen RS, Stanghelle JK.

J Rehabil Med. 2016 Aug 5. doi: 10.2340/16501977-2118. [Epub ahead of print]. PMID:27494714

Goal Management Training combined with external cuing as a means to improve emotional regulation, psychological functioning, and quality of life in patients with acquired brain injury: A randomized controlled trial.

Tornås S, Psychol C, Løvstad M, Solbakk AK, Schanke AK, Stubberud J.

Arch Phys Med Rehabil. 2016 Jul 13. pii: S0003-9993(16)30325-2. doi: 10.1016/j.apmr.2016.06.014. [Epub ahead of print]. PMID:27424292

Factors Associated With Recurrent Falls in Individuals With Traumatic Spinal Cord Injury: A Multicenter Study.

Jørgensen V, Butler Forslund E, Franzén E, Opheim A, Seiger Å, Ståhle A, Hultling C, Stanghelle JK, Wahman K, Skavberg Roaldsen K.

Arch Phys Med Rehabil. 2016 May 27. pii: S0003-9993(16)30187-3. doi: 10.1016/j.apmr.2016.04.024. [Epub ahead of print]. PMID:27240433





Publication list NVR research groups 2016

Adobor RD, Joranger P, Steen H, Navrud S, Brox JI (2016)

Re: To screen or not to screen for adolescent idiopathic scoliosis? A review of the literature

Public Health, 133, 124-5

PubMed 26872737 SFX WOS 000373734600016 (Details)

Alfstad KÅ, Torgersen H, Van Roy B, Hessen E, Hansen BH, Henning O, Clench-Aas J, Mowinckel P, Gjerstad L, Lossius MI (2016)

Psychiatric comorbidity in children and youth with epilepsy: An association with executive dysfunction?

Epilepsy Behav, 56, 88-94

PubMed 26851646 SFX WOS 000371096900016 Cristin 1334071 (Details)

Andelic N, Sigurdardottir S, Arango-Lasprilla JC, Godbolt AK (2016)

Long-Term Functional and Psychosocial Consequences and Health Care Provision after Traumatic Brain Injury

Behav Neurol, 2016, 2678081

PubMed 27034584 SFX WOS 000372624900001 (Details)

Anke A, Manskow US, Friberg O, Røe C, Arntzen C (2016)

The family experiences of in-hospital care questionnaire in severe traumatic brain injury (FECQ-TBI): a validation study

BMC Health Serv Res, 16 (1), 675

PubMed 27894286 SFX WOS 000391886100001 Cristin 1428780 (Details)

Aurlien D, Gjerstad L, Taubøll E (2016)

The role of antiepileptic drugs in sudden unexpected death in epilepsy

Seizure, 43, 56-60

PubMed 27886630 SFX WOS 000391420200011 Cristin 1414493 (Details)

Aurlien D, Olsen TR, Taubøll E, Gjerstad L, Lossius MI, Nakken KO (2016)

[Sudden unexpected death in epilepsy (SUDEP)]

Tidsskr Nor Laegeforen, 136 (2), 131-5

PubMed 26813818 SFX Cristin 1368202 (Details)

Austevoll IM, Gjestad R, Brox JI, Solberg TK, Storheim K, Rekeland F, Hermansen E, Indrekvam K, Hellum C (2016)

The effectiveness of decompression alone compared with additional fusion for lumbar spinal stenosis with degenerative spondylolisthesis: a pragmatic comparative non-inferiority observational study from the Norwegian Registry for Spine Surgery

Eur Spine J, 26 (2), 404-413

PubMed 27421276 SFX WOS 000394212100014 Cristin 1374023 (Details)





Baftiu A, Johannessen Landmark C, Rusten IR, Feet SA, Johannessen SI, Larsson PG (2016)
Changes in utilisation of antiepileptic drugs in epilepsy and non-epilepsy disorders-a
pharmacoepidemiological study and clinical implications
Eur J Clin Pharmacol, 72 (10), 1245-1254
PubMed 27411937 SFX WOS 000383624500011 Cristin 1370398 (Details)

Bakken IJ, Tveito K, Aaberg KM, Ghaderi S, Gunnes N, Trogstad L, Magnus P, Stoltenberg C, Håberg SE
(2016)
Comorbidities treated in primary care in children with chronic fatigue syndrome / myalgic
encephalomyelitis: A nationwide registry linkage study from Norway
BMC Fam Pract, 17 (1), 128
PubMed 27590471 SFX WOS 000383332000001 Cristin 1382061 (Details)

Behnan J, Stangeland B, Hosainey SA, Joel M, Olsen TK, Micci F, Glover JC, Isakson P, Brinchmann JE
(2016)
Differential propagation of stroma and cancer stem cells dictates tumorigenesis and multipotency
Oncogene, 36 (4), 570-584
PubMed 27345406 SFX WOS 000394166700013 Cristin 1413002 (Details)

Beiske KK, Kostov KH, Kostov H (2016)
Rhythmic Midtemporal Discharge in a Youth During Light Sleep
Neurodiagn J, 56 (1), 32-6
PubMed 27180505 SFX Cristin 1406000 (Details)

Beniczky S, Rosenzweig I, Scherg M, Jordanov T, Lanfer B, Lantz G, Larsson PG (2016)
Ictal EEG source imaging in presurgical evaluation: High agreement between analysis methods
Seizure, 43, 1-5
PubMed 27764709 SFX WOS 000391420200001 Cristin 1452282 (Details)

Berge T, Leikfoss IS, Brorson IS, Bos SD, Page CM, Gustavsen MW, Bjølgerud A, Holmøy T, Celius EG,
Damoiseaux J, Smolders J, Harbo HF, Spurkland A (2016)
The multiple sclerosis susceptibility genes TAGAP and IL2RA are regulated by vitamin D in CD4+ T
cells
Genes Immun, 17 (2), 118-27
PubMed 26765264 SFX WOS 000371902100006 Cristin 1322864 (Details)

Bjorland S, Moen A, Schistad E, Gjerstad J, Røe C (2016)
Genes associated with persistent lumbar radicular pain; a systematic review
BMC Musculoskelet Disord, 17 (1), 500
PubMed 27964712 SFX WOS 000395057400001 Cristin 1413581 (Details)

Bjørnevik K, Riise T, Benjaminsen E, Celius EG, Dahl OP, Kampman MT, Løken-Amsrud KI, Midgard R,
Myhr KM, Torkildsen Ø, Vatne A, Grytten N (2016)
Level of education and multiple sclerosis risk over a 50-year period: Registry-based sibling study
Mult Scler, 23 (2), 213-219
PubMed 27207453 SFX WOS 000393906700009 Cristin 1423666 (Details)





Boldingh MI, Maniaol A, Brunborg C, Dekker L, Lipka A, Harmen Niks E, Verschuuren J, Tallaksen C (2016)

Prevalence and clinical aspects of immigrants with myasthenia gravis in northern Europe

Muscle Nerve (in press)

PubMed 27641227 SFX (Details)

Boldingh MI, Maniaol AH, Brunborg C, Weedon-Fekjær H, Verschuuren JJ, Tallaksen CM (2016)

Increased risk for clinical onset of myasthenia gravis during the postpartum period

Neurology, 87 (20), 2139-2145

PubMed 27770065 SFX WOS 000392236100015 Cristin 1460110 (Details)

Bos SD, Berge T, Celius EG, Harbo HF (2016)

From genetic associations to functional studies in multiple sclerosis

Eur J Neurol, 23 (5), 847-53

PubMed 26948534 SFX WOS 000374341500007 Cristin 1367927 (Details)

Brostigen CS, Meling TR, Marthinsen PB, Scheie D, Aarhus M, Helseth E (2016)

Surgical management of colloid cyst of the third ventricle

Acta Neurol Scand, 135 (4), 484-487

PubMed 27349743 SFX WOS 000398035900015 Cristin 1461370 (Details)

Burns ML, Baftiu A, Opdal MS, Johannessen SI, Landmark CJ (2016)

Therapeutic Drug Monitoring of Clobazam and Its Metabolite-Impact of Age and Comedication on Pharmacokinetic Variability

Ther Drug Monit, 38 (3), 350-7

PubMed 26751267 SFX WOS 000376936600011 Cristin 1368140 (Details)

Carcel C, Wang X, Sato S, Stapf C, Sandset EC, Delcourt C, Arima H, Robinson T, Lavados P, Chalmers J, Anderson CS, INTERACT2 Investigators* (2016)

Degree and Timing of Intensive Blood Pressure Lowering on Hematoma Growth in Intracerebral Hemorrhage: Intensive Blood Pressure Reduction in Acute Cerebral Hemorrhage Trial-2 Results

Stroke, 47 (6), 1651-3

PubMed 27143274 SFX WOS 000377040800046 Cristin 1454296 (Details)

Celius EG, Rocca M, Andersen O (2016)

Preface

Acta Neurol Scand, 134 Suppl 200, 3

PubMed 27580898 SFX WOS 000383631700001 (Details)

Cumming P (2016)

A business of some heat: molecular imaging of phosphodiesterase 5

J Neurochem, 136 (2), 220-1

PubMed 26990291 SFX WOS 000367956800002 (Details)





Curatolo P, Bjørnvold M, Dill PE, Ferreira JC, Feucht M, Hertzberg C, Jansen A, Jóźwiak S, Kingswood JC, Kotulska K, Macaya A, Moavero R, Nabbout R, Zonnenberg BA (2016)
The Role of mTOR Inhibitors in the Treatment of Patients with Tuberous Sclerosis Complex: Evidence-based and Expert Opinions
Drugs, 76 (5), 551-65
PubMed 26927950 SFX WOS 000375052300003 Cristin 1455451 (Details)

Dahl J, Ormstad H, Aass HC, Sandvik L, Malt UF, Andreassen OA (2016)
Recovery from major depressive disorder episode after non-pharmacological treatment is associated with normalized cytokine levels
Acta Psychiatr Scand, 134 (1), 40-7
PubMed 27028967 SFX WOS 000378706000005 Cristin 1371007 (Details)

de Lange AG, Bråthen AC, Grydeland H, Sexton C, Johansen-Berg H, Andersson JL, Rohani DA, Nyberg L, Fjell AM, Walhovd KB (2016)
White matter integrity as a marker for cognitive plasticity in aging
Neurobiol Aging, 47, 74-82
PubMed 27565301 SFX WOS 000386976500009 Cristin 1397785 (Details)

De Rubeis J, Sütterlin S, Lange D, Pawelzik M, van Randenborgh A, Victor D, Vögele C (2016)
Attachment Status Affects Heart Rate Responses to Experimental Ostracism in Inpatients with Depression
PLoS One, 11 (3), e0150375
PubMed 26943924 SFX WOS 000371739400024 Cristin 1347900 (Details)

Deutschländer A, la Fougère C, Boetzel K, Albert NL, Gildehaus FJ, Bartenstein P, Xiong G, Cumming P (2016)
Occupancy of pramipexole (Sifrol) at cerebral dopamine D2/3 receptors in Parkinson's disease patients
Neuroimage Clin, 12, 41-6
PubMed 27408789 SFX WOS 000390196400006 Cristin 1376413 (Details)

Dingledine R, Hassel B (2016)
A New Approach for Epilepsy
Cerebrum, 2016
PubMed 27408679 SFX (Details)

Eide PK (2016)
The correlation between pulsatile intracranial pressure and indices of intracranial pressure-volume reserve capacity: results from ventricular infusion testing
J Neurosurg, 125 (6), 1493-1503
PubMed 26918478 SFX WOS 000388783000020 Cristin 1461628 (Details)





Eide PK, Eidsvaag VA, Nagelhus EA, Hansson HA (2016)
Cortical astrogliosis and increased perivascular aquaporin-4 in idiopathic intracranial hypertension
Brain Res, 1644, 161-75
PubMed 27188961 SFX WOS 000379105300018 Cristin 1367713 (Details)

Eide PK, Pripp AH (2016)
The prevalence of cardiovascular disease in non-communicating hydrocephalus
Clin Neurol Neurosurg, 149, 33-8
PubMed 27455422 SFX WOS 000383826500007 Cristin 1373494 (Details)

Eide PK, Pripp AH, Ringstad GA (2016)
Magnetic resonance imaging biomarkers indicate a central venous hypertension syndrome in patients with symptomatic pineal cysts
J Neurol Sci, 363, 207-16
PubMed 27000252 SFX WOS 000374078200042 Cristin 1368166 (Details)

Eide PK, Ringstad G (2016)
Increased pulsatile intracranial pressure in patients with symptomatic pineal cysts and magnetic resonance imaging biomarkers indicative of central venous hypertension
J Neurol Sci, 367, 247-55
PubMed 27423599 SFX WOS 000381167600049 Cristin 1433116 (Details)

Eide PK, Ringstad G (2016)
Results of surgery in symptomatic non-hydrocephalic pineal cysts: role of magnetic resonance imaging biomarkers indicative of central venous hypertension
Acta Neurochir (Wien), 159 (2), 349-361
PubMed 27878615 SFX WOS 000393022200024 Cristin 1414882 (Details)

Eising E, Huisman SM, Mahfouz A, Vijfhuizen LS, Anttila V, Winsvold BS, Kurth T, Ikram MA, Freilinger T, Kaprio J, Boomsma DI, van Duijn CM, Järvelin MR, Zwart JA, Quaye L, Strachan DP, Kubisch C, Dichgans M, Davey Smith G, Stefansson K, Palotie A, Chasman DI, Ferrari MD, Terwindt GM, de Vries B et al. (2016)
Gene co-expression analysis identifies brain regions and cell types involved in migraine pathophysiology: a GWAS-based study using the Allen Human Brain Atlas
Hum Genet, 135 (4), 425-39
PubMed 26899160 SFX WOS 000372610000006 Cristin 1367930 (Details)

Elsvåshagen T, Zuzarte P, Westlye LT, Bøen E, Josefsen D, Boye B, Hol PK, Malt UF, Young LT, Andreazza AC (2016)
Dentate gyrus-cornu ammonis (CA) 4 volume is decreased and associated with depressive episodes and lipid peroxidation in bipolar II disorder: Longitudinal and cross-sectional analyses
Bipolar Disord, 18 (8), 657-668
PubMed 27995733 SFX WOS 000392817000005 Cristin 1446809 (Details)





- Evensen K, Aulie HA, Rønning OM, Flatø B, Russell D (2016)
Carotid Atherosclerosis in Adult Patients with Persistently Active Juvenile Idiopathic Arthritis Compared with Healthy Controls
J Rheumatol, 43 (4), 810-5
PubMed 26879363 SFX WOS 000378169100020 Cristin 1397505 (Details)
- Farmen AH, Grundt JH, Tomson T, Nakken KO, Nakling J, Mowinchel P, Øie M, Lossius MI (2016)
Age-specific birth rates in women with epilepsy: a population-based study
Brain Behav, 6 (8), e00492
PubMed 27547497 SFX WOS 000382676900007 Cristin 1350321 (Details)
- Farmen AH, Ringstad G, Kerty E (2016)
[Idiopathic intracranial hypertension as a cause of headache]
Tidsskr Nor Laegeforen, 136 (22), 1895-1898
PubMed 27929555 SFX Cristin 1433106 (Details)
- Fayzullin A, Tuvnes FA, Skjellegrind HK, Behnan J, Mughal AA, Langmoen IA, Vik-Mo EO (2016)
Time-lapse phenotyping of invasive glioma cells ex vivo reveals subtype-specific movement patterns guided by tumor core signaling
Exp Cell Res, 349 (2), 199-213
PubMed 27515001 SFX WOS 000389163200001 Cristin 1416129 (Details)
- Fjell AM, Sneve MH, Grydeland H, Storsve AB, Amlie IK, Yendiki A, Walhovd KB (2016)
Relationship between structural and functional connectivity change across the adult lifespan: A longitudinal investigation
Hum Brain Mapp, 38 (1), 561-573
PubMed 27654880 SFX WOS 000390259700038 Cristin 1393411 (Details)
- Forkmann T, Meessen J, Teismann T, Sütterlin S, Gauggel S, Mainz V (2016)
Resting vagal tone is negatively associated with suicide ideation
J Affect Disord, 194, 30-2
PubMed 26802504 SFX WOS 000370724200005 Cristin 1325160 (Details)
- Fredø HL, Rizvi SA, Rezai M, Rønning P, Lied B, Helseth E (2016)
Complications and long-term outcomes after open surgery for traumatic subaxial cervical spine fractures: a consecutive series of 303 patients
BMC Surg, 16 (1), 56
PubMed 27526852 SFX WOS 000381963200001 Cristin 1396232 (Details)
- Frič R, Eide PK (2016)
Comparative observational study on the clinical presentation, intracranial volume measurements, and intracranial pressure scores in patients with either Chiari malformation Type I or idiopathic intracranial hypertension
J Neurosurg, 126 (4), 1312-1322
PubMed 27341045 SFX WOS 000397837900035 (Details)





Frič R, Lindstrøm EK, Ringstad GA, Mardal KA, Eide PK (2016)

The association between the pulse pressure gradient at the cranio-cervical junction derived from phase-contrast magnetic resonance imaging and invasively measured pulsatile intracranial pressure in symptomatic patients with Chiari malformation type 1

Acta Neurochir (Wien), 158 (12), 2295-2304

PubMed 27743249 SFX WOS 000388113100009 Cristin 1388482 (Details)

Frich JC, Rae D, Roxburgh R, Miedzybrodzka ZH, Edmondson M, Pope EB, Goodman L, Haddad MS, Giuliano J, Nelson EC, Guttman M, Nance M (2016)

Health Care Delivery Practices in Huntington's Disease Specialty Clinics: An International Survey

J Huntingtons Dis, 5 (2), 207-13

PubMed 27372053 SFX Cristin 1363424 (Details)

Gormley P, Anttila V, Winsvold BS, Palta P, Esko T, Pers TH, Farh KH, Cuenca-Leon E, Muona M, Furlotte NA, Kurth T, Ingason A, McMahon G, Ligthart L, Terwindt GM, Kallela M, Freilinger TM, Ran C, Gordon SG, Stam AH, Steinberg S, Borck G, Koiranen M, Quaye L, Adams HH et al. (2016)

Meta-analysis of 375,000 individuals identifies 38 susceptibility loci for migraine

Nat Genet, 48 (8), 856-66

PubMed 27322543 SFX WOS 000380755100008 Cristin 1375709 (Details)

Gormley P, Winsvold BS, Nyholt DR, Kallela M, Chasman DI, Palotie A (2016)

Migraine genetics: from genome-wide association studies to translational insights

Genome Med, 8 (1), 86

PubMed 27543003 SFX WOS 000381619000001 (Details)

Granan LP (2016)

The Ising Model Applied on Chronification of Pain

Pain Med, 17 (1), 5-9

PubMed 26398917 SFX WOS 000373730500003 Cristin 1396317 (Details)

Grane VA, Brunner JF, Endestad T, Aasen IE, Kropotov J, Knight RT, Solbakk AK (2016)

Correction: ERP Correlates of Proactive and Reactive Cognitive Control in Treatment-Naïve Adult ADHD

PLoS One, 11 (9), e0163404

PubMed 27631088 SFX (Details)

Grane VA, Brunner JF, Endestad T, Aasen IE, Kropotov J, Knight RT, Solbakk AK (2016)

ERP Correlates of Proactive and Reactive Cognitive Control in Treatment-Naïve Adult ADHD

PLoS One, 11 (7), e0159833

PubMed 27448275 SFX WOS 000380799000046 Cristin 1375287 (Details)

Halvorsen KH, Johannessen Landmark C, Granas AG (2016)

Prevalence of Different Combinations of Antiepileptic Drugs and CNS Drugs in Elderly Home Care Service and Nursing Home Patients in Norway

Epilepsy Res Treat, 2016, 5153093

PubMed 27525114 SFX Cristin 1374902 (Details)





Hansen BH, Alfstad KÅ, van Roy B, Henning O, Lossius MI (2016)
Sleep problems in children and adolescents with epilepsy: Associations with psychiatric comorbidity
Epilepsy Behav, 62, 14-9
PubMed 27448238 SFX WOS 000384392500004 Cistin 1366700 (Details)

Haugen AJ, Grøvle L, Brox JI, Natvig B, Grotle M (2016)
Pain-related fear and functional recovery in sciatica: results from a 2-year observational study
J Pain Res, 9, 925-931
PubMed 27826215 SFX WOS 000389838900003 Cistin 1406762 (Details)

Hellstrøm T, Westlye LT, Server A, Løvstad M, Brunborg C, Lund MJ, Nordhøy W, Andreassen OA, Andelic N (2016)
Volumetric and morphometric MRI findings in patients with mild traumatic brain injury
Brain Inj, 30 (13-14), 1683-1691
PubMed 27996331 SFX WOS 000391343800023 Cistin 1359941 (Details)

Henning OJ, Nakken KO, Træen B, Mowinckel P, Lossius M (2016)
Sexual problems in people with refractory epilepsy
Epilepsy Behav, 64 (Pt A), 293
PubMed 27727079 SFX WOS 000389734800052 (Details)

Henning OJ, Nakken KO, Træen B, Mowinckel P, Lossius M (2016)
Sexual problems in people with refractory epilepsy
Epilepsy Behav, 61, 174-9
PubMed 27371882 SFX WOS 000381248000031 Cistin 1359094 (Details)

Hermansen E, Romild UK, Austevoll IM, Solberg T, Storheim K, Brox JI, Hellum C, Indrekvam K (2016)
Does surgical technique influence clinical outcome after lumbar spinal stenosis decompression? A comparative effectiveness study from the Norwegian Registry for Spine Surgery
Eur Spine J, 26 (2), 420-427
PubMed 27262561 SFX WOS 000394212100016 Cistin 1406768 (Details)

Hestad KA, Weider S, Nilsen KB, Indredavik MS, Sand T (2016)
Increased frontal electroencephalogram theta amplitude in patients with anorexia nervosa compared to healthy controls
Neuropsychiatr Dis Treat, 12, 2419-2423
PubMed 27703359 SFX WOS 000384139300001 Cistin 1390597 (Details)

Heuch I, Heuch I, Hagen K, Zwart JA (2016)
Is there a U-shaped relationship between physical activity in leisure time and risk of chronic low back pain? A follow-up in the HUNT Study
BMC Public Health, 16, 306
PubMed 27068452 SFX WOS 000373711600004 Cistin 1349861 (Details)





Heuser K, Nakken KO, Sandvig I, Taubøll E (2016)
[What causes febrile convulsions?]
Tidsskr Nor Laegeforen, 136 (1), 36-8
PubMed 26757658 SFX Cristin 1416352 (Details)

Hibar DP, Westlye LT, van Erp TG, Rasmussen J, Leonardo CD, Faskowitz J, Haukvik UK, Hartberg CB, Doan NT, Agartz I, Dale AM, Gruber O, Krämer B, Trost S, Liberg B, Abé C, Ekman CJ, Ingvar M, Landén M, Fears SC, Freimer NB, Bearden CE, Costa Rica/Colombia Consortium for Genetic Investigation of Bipolar Endophenotypes, Sprooten E, Glahn DC et al. (2016)
Subcortical volumetric abnormalities in bipolar disorder
Mol Psychiatry, 21 (12), 1710-1716
PubMed 26857596 SFX WOS 000388720600010 Cristin 1416365 (Details)

Hoegestoel EA, Berg-Johnsen J (2016)
Regression of Intracranial Meningioma during Treatment with α 1-Adrenoceptor Blocker
J Neurol Surg Rep, 77 (1), e62-5
PubMed 27175325 SFX Cristin 1461622 (Details)

Hoffman KP, Playford DE, Grill E, Soberg HL, Brohi K (2016)
Minimum data set to measure rehabilitation needs and health outcome after major trauma: application of an international framework
Eur J Phys Rehabil Med, 52 (3), 331-46
PubMed 26745362 SFX WOS 000384946700009 Cristin 1452928 (Details)

Holmøy T, Beiske AG, Zarnovicky S, Myro AZ, Røsjø E, Kerty E (2016)
Severe inflammatory disease activity 14 months after cessation of Natalizumab in a patient with Leber's optic neuropathy and multiple sclerosis - a case report
BMC Neurol, 16 (1), 197
PubMed 27756254 SFX WOS 000385592700001 Cristin 1415434 (Details)

Hope S, Johannessen CH, Aanonsen NO, Strømme P (2016)
The investigation of inborn errors of metabolism as an underlying cause of idiopathic intellectual disability in adults in Norway
Eur J Neurol, 23 Suppl 1, 36-44
PubMed 26563096 SFX WOS 000368237800005 (Details)

Hosainey SA, Meling TR (2016)
A 54-year-old man with 12 intracranial aneurysms and familial subarachnoid hemorrhage: case report
Neurosurg Rev, 39 (4), 711-6
PubMed 27452953 SFX WOS 000384226700031 Cristin 1423797 (Details)





Hough D, Bellingham M, Haraldsen IR, McLaughlin M, Rennie M, Robinson JE, Solbakk AK, Evans NP (2016)

Spatial memory is impaired by peripubertal GnRH agonist treatment and testosterone replacement in sheep

Psychoneuroendocrinology, 75, 173-182

PubMed 27837697 SFX WOS 000390498100021 (Details)

Hough D, Bellingham M, Haraldsen IR, McLaughlin M, Robinson JE, Solbakk AK, Evans NP (2016)

A reduction in long-term spatial memory persists after discontinuation of peripubertal GnRH agonist treatment in sheep

Psychoneuroendocrinology, 77, 1-8

PubMed 27987429 SFX WOS 000397375100001 Cristin 1461634 (Details)

Idland AV, Sala-Llonch R, Borza T, Watne LO, Wyller TB, Brækhus A, Zetterberg H, Blennow K, Walhovd KB, Fjell AM (2016)

CSF neurofilament light levels predict hippocampal atrophy in cognitively healthy older adults
Neurobiol Aging, 49, 138-144

PubMed 27794264 SFX WOS 000393977700014 Cristin 1397850 (Details)

Iqbal Z, Pihlstrøm L, Rengmark A, Henriksen SP, Linder J, Forsgren L, Toft M (2016)

Rare variants in dementia genes and Parkinson's disease

Eur J Hum Genet, 24 (12), 1661-1662

PubMed 27329738 SFX WOS 000394114500003 (Details)

Jahic A, Erichsen AK, Deufel T, Tallaksen CM, Beetz C (2016)

A polymorphic Alu insertion that mediates distinct disease-associated deletions

Eur J Hum Genet, 24 (9), 1371-4

PubMed 26932189 SFX WOS 000382310600022 (Details)

Jain K, Ringstad G, Eide PK, Mardal KA (2016)

Direct numerical simulation of transitional hydrodynamics of the cerebrospinal fluid in Chiari I malformation: The role of cranio-vertebral junction

Int J Numer Method Biomed Eng (in press)

PubMed 27863152 SFX Cristin 1433123 (Details)

Johannessen Landmark C, Henning O, Johannessen SI (2016)

Proconvulsant effects of antidepressants - What is the current evidence?

Epilepsy Behav, 61, 287-91

PubMed 26926001 SFX WOS 000381248000048 Cristin 1347814 (Details)

Johannessen Landmark C, Svendsen T, Dinarevic J, Kufas RF, Reimers A, Brodtkorb E, Baftiu A, Burns ML, Johannessen SI (2016)

The Impact of Pharmacokinetic Interactions With Eslicarbazepine Acetate Versus Oxcarbazepine and Carbamazepine in Clinical Practice

Ther Drug Monit, 38 (4), 499-505

PubMed 27414974 SFX WOS 000381427700011 Cristin 1375461 (Details)





Johnsen MB, Guddal MH, Småstuen MC, Moksnes H, Engebretsen L, Storheim K, Zwart JA (2016)
Sport Participation and the Risk of Anterior Cruciate Ligament Reconstruction in Adolescents: A
Population-based Prospective Cohort Study (The Young-HUNT Study)
Am J Sports Med, 44 (11), 2917-2924
PubMed 27159313 SFX WOS 000387359900004 Cristin 1363980 (Details)

Johnsen MB, Hellevik AI, Baste V, Furnes O, Langhammer A, Flugsrud G, Nordsletten L, Zwart JA,
Storheim K (2016)
Leisure time physical activity and the risk of hip or knee replacement due to primary osteoarthritis: a
population based cohort study (The HUNT Study)
BMC Musculoskelet Disord, 17, 86
PubMed 26879518 SFX WOS 000370130700007 Cristin 1342713 (Details)

Juritzen TI, Soberg HL, Røe C, Saebu M, Engen G, Bliksvaer T, Engebretsen E (2016)
The One or the Many: Quantified Subjectivity and Aggregated Uniqueness in Qualitative
Rehabilitation Research
Qual Health Res, 27 (1), 51-59
PubMed 27753632 SFX WOS 000390859300005 Cristin 1393628 (Details)

Jusufovic M, Sandset EC, Bath PM, Berge E, Scandinavian Candesartan Acute Stroke Trial (SCAST)
Study Group (2016)
Early blood pressure lowering treatment in acute stroke. Ordinal analysis of vascular events in the
Scandinavian Candesartan Acute Stroke Trial (SCAST)
J Hypertens, 34 (8), 1594-8
PubMed 27228435 SFX WOS 000379448100023 Cristin 1453879 (Details)

Jusufovic M, Sandset EC, Skagen K, Skjelland M (2016)
Blood Pressure Lowering Treatment in Patients with Carotid Artery Stenosis
Curr Hypertens Rev, 12 (2), 148-55
PubMed 27292176 SFX (Details)

Karic T, Røe C, Nordenmark TH, Becker F, Sorteberg A (2016)
Impact of early mobilization and rehabilitation on global functional outcome one year after
aneurysmal subarachnoid hemorrhage
J Rehabil Med, 48 (8), 676-682
PubMed 27494170 SFX WOS 000384943900006 Cristin 1404544 (Details)

Karic T, Røe C, Nordenmark TH, Becker F, Sorteberg W, Sorteberg A (2016)
Effect of early mobilization and rehabilitation on complications in aneurysmal subarachnoid
hemorrhage
J Neurosurg, 126 (2), 518-526
PubMed 27058204 SFX WOS 000393089100023 (Details)





Karterud HN, Haavet OR, Risør MB (2016)
Social participation in young people with nonepileptic seizures (NES): A qualitative study of managing legitimacy in everyday life
Epilepsy Behav, 57 (Pt A), 23-8
PubMed 26921594 SFX WOS 000374256700005 Cristin 1323478 (Details)

Keshari PK, Harbo HF, Myhr KM, Aarseth JH, Bos SD, Berge T (2016)
Allelic imbalance of multiple sclerosis susceptibility genes IKZF3 and IQGAP1 in human peripheral blood
BMC Genet, 17, 59
PubMed 27080863 SFX WOS 000374138300001 Cristin 1364484 (Details)

Keshavan A, Paul F, Beyer MK, Zhu AH, Papinutto N, Shinohara RT, Stern W, Amann M, Bakshi R, Bischof A, Carriero A, Comabella M, Crane JC, D'Alfonso S, Demaerel P, Dubois B, Filippi M, Fleischer V, Fontaine B, Gaetano L, Goris A, Graetz C, Gröger A, Groppa S, Hafler DA et al. (2016)
Power estimation for non-standardized multisite studies
Neuroimage, 134, 281-94
PubMed 27039700 SFX WOS 000378045900027 Cristin 1368206 (Details)

Kim MO, Eide PK, O'Rourke MF, Adji A, Avolio AP (2016)
Intracranial Pressure Waveforms are More Closely Related to Central Aortic than Radial Pressure Waveforms: Implications for Pathophysiology and Therapy
Acta Neurochir Suppl, 122, 61-4
PubMed 27165878 SFX WOS 000390281000012 Cristin 1454943 (Details)

Kist AM, Sagafos D, Rush AM, Neacsu C, Eberhardt E, Schmidt R, Lunden LK, Ørstavik K, Kaluza L, Meents J, Zhang Z, Carr TH, Salter H, Malinowsky D, Wollberg P, Krupp J, Kleggetveit IP, Schmelz M, Jørum E, Lampert A, Namer B (2016)
SCN10A Mutation in a Patient with Erythromelalgia Enhances C-Fiber Activity Dependent Slowing
PLoS One, 11 (9), e0161789
PubMed 27598514 SFX WOS 000383254800020 Cristin 1451963 (Details)

Kleggetveit IP, Schmidt R, Namer B, Salter H, Helås T, Schmelz M, Jørum E (2016)
Pathological nociceptors in two patients with erythromelalgia-like symptoms and rare genetic Nav 1.9 variants
Brain Behav, 6 (10), e00528
PubMed 27781142 SFX WOS 000387586800008 Cristin 1452728 (Details)

Kobulashvili T, Höfler J, Dobesberger J, Ernst F, Ryvlin P, Cross JH, Braun K, Dimova P, Francione S, Hecimovic H, Helmstaedter C, Kimiskidis VK, Lossius MI, Malmgren K, Marusic P, Steinhoff BJ, Boon P, Craiu D, Delanty N, Fabo D, Gil-Nagel A, Guekht A, Hirsch E, Kalviainen R, Mameniskienė R et al. (2016)
Current practices in long-term video-EEG monitoring services: A survey among partners of the EPILEPSY pilot network of reference for refractory epilepsy and epilepsy surgery
Seizure, 38, 38-45
PubMed 27104922 SFX WOS 000377834400008 Cristin 1438994 (Details)





- Koht J, Løstegaard SO, Wedding I, Vidailhet M, Louha M, Tallaksen CM (2016)
Benign hereditary chorea, not only chorea: a family case presentation
Cerebellum Ataxias, 3, 3
PubMed 26839702 SFX Cristin 1461649 (Details)
- Kongsgaard UE, Fischer K, Pedersen TE, Bukholm IR, Warncke T (2016)
Complaints to the Norwegian System of Patient Injury Compensation 2001-14 following nerve blockade
Tidsskr Nor Laegeforen, 136 (23-24), 1989-1992
PubMed 28004547 SFX Cristin 1421236 (Details)
- Kristiansen JA, Balteskard L, Slettebø H, Nygaard ØP, Lied B, Kolstad F, Solberg TK (2016)
The use of surgery for cervical degenerative disease in Norway in the period 2008-2014 : A population-based study of 6511 procedures
Acta Neurochir (Wien), 158 (5), 969-74
PubMed 26983821 SFX WOS 000373741700021 Cristin 1367326 (Details)
- Kurz KD, Ringstad G, Odland A, Advani R, Farbu E, Kurz MW (2016)
Radiological imaging in acute ischaemic stroke
Eur J Neurol, 23 Suppl 1, 8-17
PubMed 26563093 SFX WOS 000368237800002 Cristin 1309738 (Details)
- Kwiecińska P, Taubøll E, Grzyb E, Fiedor E, Ptak A, Gregoraszczyk EL (2016)
Valproic Acid as a Promising Co-Treatment With Paclitaxel and Doxorubicin in Different Ovarian Carcinoma Cell Lines
Int J Gynecol Cancer, 26 (9), 1546-1556
PubMed 27654264 SFX WOS 000387106200002 Cristin 1415537 (Details)
- König M, Osnes TA, Lobmaier I, Bjerkehagen B, Bruland ØS, Sundby Hall K, Meling TR (2016)
Multimodal treatment of craniofacial osteosarcoma with high-grade histology. A single-center experience over 35 years
Neurosurg Rev (in press)
PubMed 27858303 SFX Cristin 1402984 (Details)
- Landmark CJ, Johannessen SI, Tomson T (2016)
Dosing strategies for antiepileptic drugs: from a standard dose for all to individualised treatment by implementation of therapeutic drug monitoring
Epileptic Disord, 18 (4), 367-383
PubMed 27965183 SFX WOS 000392460700004 Cristin 1421675 (Details)
- Levinsky A, Papyan S, Weinberg G, Stadheim T, Eide PK (2016)
Non-invasive estimation of static and pulsatile intracranial pressure from transcranial acoustic signals
Med Eng Phys, 38 (5), 477-84
PubMed 26997563 SFX WOS 000375366400007 Cristin 1364963 (Details)





- Lossius A, Johansen JN, Vartdal F, Holmøy T (2016)
High-throughput sequencing of immune repertoires in multiple sclerosis
Ann Clin Transl Neurol, 3 (4), 295-306
PubMed 27081660 SFX WOS 000373613300005 Cistin 1425839 (Details)
- Lossius MI, Alfstad KÅ, Van Roy B, Mowinckel P, Clench-Aas J, Gjerstad L, Nakken KO (2016)
Early sexual debut in Norwegian youth with epilepsy: A population-based study
Epilepsy Behav, 56, 1-4
PubMed 26789985 SFX WOS 000371096900001 Cistin 1356897 (Details)
- Lund C, Striano P, Sorte HS, Parisi P, Iacomino M, Sheng Y, Vigeland MD, Øye AM, Møller RS, Selmer KK, Zara F (2016)
Exome Sequencing Fails to Identify the Genetic Cause of Aicardi Syndrome
Mol Syndromol, 7 (4), 234-238
PubMed 27781033 SFX Cistin 1396016 (Details)
- Lunde NN, Holm S, Dahl TB, Elyouncha I, Sporsheim B, Gregersen I, Abbas A, Skjelland M, Espevik T, Solberg R, Johansen HT, Halvorsen B (2016)
Increased levels of legumain in plasma and plaques from patients with carotid atherosclerosis
Atherosclerosis, 257, 216-223
PubMed 27940038 SFX WOS 000397405600029 Cistin 1403641 (Details)
- Løchting I, Storheim K, Werner EL, Småstuen Cvancarova M, Grotle M (2016)
Evaluation of individualized quality of life and illness perceptions in low back pain. A patient education cluster randomized controlled trial
Patient Educ Couns, 99 (12), 1992-1998
PubMed 27486051 SFX WOS 000391223200010 Cistin 1414267 (Details)
- Løvstad M, Sigurdardottir S, Andersson S, Grane VA, Moberget T, Stubberud J, Solbakk AK (2016)
Behavior Rating Inventory of Executive Function Adult Version in Patients with Neurological and Neuropsychiatric Conditions: Symptom Levels and Relationship to Emotional Distress
J Int Neuropsychol Soc, 22 (6), 682-94
PubMed 27126218 SFX WOS 000382484700011 Cistin 1356038 (Details)
- Magnussen RA, Trojani C, Granan LP, Neyret P, Colombet P, Engebretsen L, Wright RW, Kaeding CC, MARS Group, SFA Revision ACL Group (2016)
Erratum to: Patient demographics and surgical characteristics in ACL revision: a comparison of French, Norwegian, and North American cohorts
Knee Surg Sports Traumatol Arthrosc, 24 (11), 3694-3695
PubMed 26537594 SFX WOS 000387286500038 (Details)
- Malt EA, Juhasz K, Malt UF, Naumann T (2016)
A Role for the Transcription Factor Nk2 Homeobox 1 in Schizophrenia: Convergent Evidence from Animal and Human Studies
Front Behav Neurosci, 10, 59
PubMed 27064909 SFX WOS 000372959200001 Cistin 1362122 (Details)





Mannion AF, Brox JI, Fairbank JC (2016)

Consensus at last! Long-term results of all randomized controlled trials show that fusion is no better than non-operative care in improving pain and disability in chronic low back pain

Spine J, 16 (5), 588-90

PubMed 27261844 SFX WOS 000377406100031 (Details)

Meling TR (2016)

Anterior communicating artery division in the bifrontal basal interhemispheric approach

Acta Neurochir (Wien), 158 (9), 1709-10

PubMed 27395019 SFX WOS 000381987100010 (Details)

Mevaag M, Henning O, Baftiu A, Granas AG, Johannessen SI, Nakken KO, Johannessen Landmark C (2016)

Discrepancies between physicians' prescriptions and patients' use of antiepileptic drugs

Acta Neurol Scand, 135 (1), 80-87

PubMed 26923477 SFX WOS 000389421400007 Cristin 1347816 (Details)

Mikkelsen R, Røddevand LN, Wiig US, Zahl SM, Berntsen T, Skarbø AB, Egge A, Helseth E, Andersson S, Wester K (2016)

Neurocognitive and psychosocial function in children with benign external hydrocephalus (BEH)-a long-term follow-up study

Childs Nerv Syst, 33 (1), 91-99

PubMed 27848005 SFX WOS 000394348300014 Cristin 1404209 (Details)

Moen A, Lind AL, Thulin M, Kamali-Moghaddam M, Røe C, Gjerstad J, Gordh T (2016)

Inflammatory Serum Protein Profiling of Patients with Lumbar Radicular Pain One Year after Disc Herniation

Int J Inflam, 2016, 3874964

PubMed 27293953 SFX Cristin 1361731 (Details)

Moen MN, Fjær R, Hamdani EH, Laerdahl JK, Menchini RJ, Vigeland MD, Sheng Y, Undlien DE, Hassel B, Salih MA, El Khashab HY, Selmer KK, Chaudhry FA (2016)

Pathogenic variants in KCTD7 perturb neuronal K⁺ fluxes and glutamine transport

Brain, 139 (Pt 12), 3109-3120

PubMed 27742667 SFX WOS 000392709800014 Cristin 1443640 (Details)

Morland C, Pettersen MN, Hassel B (2016)

Hyperosmolar sodium chloride is toxic to cultured neurons and causes reduction of glucose metabolism and ATP levels, an increase in glutamate uptake, and a reduction in cytosolic calcium

Neurotoxicology, 54, 34-43

PubMed 26994581 SFX WOS 000377054100004 Cristin 1361710 (Details)





Mouthaan BE, Rados M, Barsi P, Boon P, Carmichael DW, Carrette E, Craiu D, Cross JH, Diehl B, Dimova P, Fabo D, Francione S, Gaskin V, Gil-Nagel A, Grigoreva E, Guekht A, Hirsch E, Hecimovic H, Helmstaedter C, Jung J, Kalviainen R, Kelemen A, Kimiskidis V, Kobulashvili T, Krsek P et al. (2016) Current use of imaging and electromagnetic source localization procedures in epilepsy surgery centers across Europe
Epilepsia, 57 (5), 770-6
PubMed 27012361 SFX WOS 000380140700013 Cristin 1438943 (Details)

Munthe E, Riss PJ, Saga TA, Haraldsen I, Grad I, Bogsrud TV, Bach-Gansmo T (2016) FDG-based quantitative comparison of glucose metabolism in vitro, exemplified by a head-to-head comparison between a triple-negative breast cancer cell line and a non-malignant foetal cell line
Clin Physiol Funct Imaging (in press)
PubMed 27297457 SFX (Details)

Myhre K, Lau B, Marchand GH, Leivseth G, Bautz-Holter E, Røe C (2016) Demand, Control and Support at Work Among Sick-Listed Patients with Neck or Back Pain: A Prospective Study
J Occup Rehabil, 26 (2), 183-94
PubMed 26286432 SFX WOS 000375786500008 (Details)

Møllersen L, Moldestad O, Rowe AD, Bjølgerud A, Holm I, Tveterås L, Klungland A, Retterstøl L (2016) Effects of Anthocyanins on CAG Repeat Instability and Behaviour in Huntington's Disease R6/1 Mice
PLoS Curr, 8
PubMed 27540492 SFX Cristin 1441530 (Details)

Mørch RH, Dieset I, Færden A, Hope S, Aas M, Nerhus M, Gardsjord ES, Joa I, Morken G, Agartz I, Aukrust P, Djurovic S, Melle I, Ueland T, Andreassen OA (2016) Inflammatory evidence for the psychosis continuum model
Psychoneuroendocrinology, 67, 189-97
PubMed 26923849 SFX WOS 000374603300021 Cristin 1367316 (Details)

Normann KR, Øystese KA, Berg JP, Lekva T, Berg-Johnsen J, Bollerslev J, Olarescu NC (2016) Selection and validation of reliable reference genes for RT-qPCR analysis in a large cohort of pituitary adenomas
Mol Cell Endocrinol, 437, 183-189
PubMed 27561203 SFX WOS 000386408200017 Cristin 1397621 (Details)

Nygaard E, Slinning K, Moe V, Walhovd KB (2016) Behavior and Attention Problems in Eight-Year-Old Children with Prenatal Opiate and Poly-Substance Exposure: A Longitudinal Study
PLoS One, 11 (6), e0158054
PubMed 27336798 SFX WOS 000378389200098 Cristin 1365660 (Details)





Olberg DE, Bauer N, Andressen KW, Hjørnevik T, Cumming P, Levy FO, Klaveness J, Haraldsen I, Sutcliffe JL (2016)

Brain penetrant small molecule (18)F-GnRH receptor (GnRH-R) antagonists: Synthesis and preliminary positron emission tomography imaging in rats

Nucl Med Biol, 43 (8), 478-89

PubMed 27236283 SFX WOS 000380579200004 Cistin 1358611 (Details)

Olsen TK, Panagopoulos I, Gorunova L, Micci F, Andersen K, Kilen Andersen H, Meling TR, Due-Tønnessen B, Scheie D, Heim S, Brandal P (2016)

Novel fusion genes and chimeric transcripts in ependymal tumors

Genes Chromosomes Cancer, 55 (12), 944-953

PubMed 27401149 SFX WOS 000387774100005 Cistin 1415764 (Details)

Paramel Varghese G, Folkersen L, Strawbridge RJ, Halvorsen B, Yndestad A, Ranheim T, Krohg-Sørensen K, Skjelland M, Espevik T, Aukrust P, Lengquist M, Hedin U, Jansson JH, Fransén K, Hansson GK, Eriksson P, Sirsjö A (2016)

NLRP3 Inflammasome Expression and Activation in Human Atherosclerosis

J Am Heart Assoc, 5 (5)

PubMed 27207962 SFX WOS 000386711200020 Cistin 1454342 (Details)

Paulsen AH, Due-Tønnessen BJ, Lundar T, Lindegaard KF (2016)

Cerebrospinal fluid (CSF) shunting and ventriculocisternostomy (ETV) in 400 pediatric patients. Shifts in understanding, diagnostics, case-mix, and surgical management during half a century

Childs Nerv Syst, 33 (2), 259-268

PubMed 27796553 SFX WOS 000396904100011 Cistin 1445368 (Details)

Paulsen AH, Due-Tønnessen BJ, Lundar T, Lindegaard KF (2016)

Persistent shunt dependency and very late shunt failure in a 3-year-old boy with idiopathic intracranial hypertension (IIH)

Childs Nerv Syst, 33 (2), 213-215

PubMed 27988877 SFX WOS 000396904100003 (Details)

Pedurupillay CR, Amundsen SS, Barøy T, Rasmussen M, Blomhoff A, Stadheim BF, Ørstavik K, Holmgren A, Iqbal T, Frengen E, Miscio D, Strømme P (2016)

Clinical and molecular characteristics in three families with biallelic mutations in IGHMBP2

Neuromuscul Disord, 26 (9), 570-5

PubMed 27450922 SFX WOS 000383944600003 Cistin 1415802 (Details)

Persson K, Selbæk G, Brækhus A, Beyer M, Barca M, Engedal K (2016)

Fully automated structural MRI of the brain in clinical dementia workup

Acta Radiol, 58 (6), 740-747

PubMed 27687251 SFX WOS 000399995700016 Cistin 1389331 (Details)





- Pihlstrøm L, Morset KR, Grimstad E, Vitelli V, Toft M (2016)
A cumulative genetic risk score predicts progression in Parkinson's disease
Mov Disord, 31 (4), 487-90
PubMed 26853697 SFX WOS 000374546300007 Cistin 1367426 (Details)
- Pinxsterhuis I, Sandvik L, Strand EB, Bautz-Holter E, Sveen U (2016)
Effectiveness of a group-based self-management program for people with chronic fatigue syndrome:
a randomized controlled trial
Clin Rehabil, 31 (1), 93-103
PubMed 26672998 SFX WOS 000390402800010 Cistin 1319421 (Details)
- Popperud TH, Boldingh MI, Brunborg C, Faiz KW, Heldal AT, Maniaol AH, Müller KI, Rasmussen M,
Øymar K, Kerty E (2016)
Juvenile myasthenia gravis in Norway: A nationwide epidemiological study
Eur J Paediatr Neurol, 21 (2), 312-317
PubMed 27666466 SFX WOS 000395954600014 Cistin 1428771 (Details)
- Qiu M, Sato S, Zheng D, Wang X, Carcel C, Hirakawa Y, Sandset EC, Delcourt C, Arima H, Wang J,
Chalmers J, Anderson CS, INTERACT Investigators* (2016)
Admission Heart Rate Predicts Poor Outcomes in Acute Intracerebral Hemorrhage: The Intensive
Blood Pressure Reduction in Acute Cerebral Hemorrhage Trial Studies
Stroke, 47 (6), 1479-85
PubMed 27165954 SFX WOS 000377040800020 Cistin 1445258 (Details)
- Roe C, Myhre K, Marchand GH, Lau B, Leivseth G, Bautz-Holter E (2016)
Measurement Properties of the Nordic Questionnaire for Psychological and Social Factors at Work: A
Rasch Analysis
J Appl Meas, 17 (2), 227-238
PubMed 28009586 SFX Cistin 1430218 (Details)
- Ronning PA, Helseth E, Meling TR, Johannesen TB (2016)
Pregnancy, epilepsy, and glioma survival Response
J. Neurosurg., 125 (2), 519
WOS 000380834900040 (Details)
- Roos E, Mariosa D, Ingre C, Lundholm C, Wirdefeldt K, Roos PM, Fang F (2016)
Depression in amyotrophic lateral sclerosis
Neurology, 86 (24), 2271-7
PubMed 27164661 SFX WOS 000378721000015 Cistin 1451652 (Details)
- Rost S, Van Ryckeghem DM, Koval P, Sütterlin S, Vögele C, Crombez G (2016)
Affective instability in patients with chronic pain: a diary approach
Pain, 157 (8), 1783-90
PubMed 27075427 SFX WOS 000386014000026 Cistin 1359462 (Details)





Rydning SL, Wedding IM, Koht J, Chawla M, Øye AM, Sheng Y, Vigeland MD, Selmer KK, Tallaksen CM (2016)

A founder mutation p.H701P identified as a major cause of SPG7 in Norway

Eur J Neurol, 23 (4), 763-71

PubMed 26756429 SFX WOS 000372972300019 Cristin 1331849 (Details)

Røe C, Preede L, Dalen H, Bautz-Holter E, Nyquist A, Sandvik L, Saebu M (2016)

Does adapted physical activity-based rehabilitation improve mental and physical functioning? A randomized trial

Eur J Phys Rehabil Med (in press)

PubMed 27171538 SFX (Details)

Rønning PA, Helseth E, Meling TR, Johannesen TB (2016)

The effect of pregnancy on survival in a low-grade glioma cohort

J Neurosurg, 125 (2), 393-400

PubMed 26722849 SFX WOS 000380834900020 Cristin 1331336 (Details)

Sagafos D, Kleggetveit IP, Helås T, Schmidt R, Minde J, Namer B, Schmelz M, Jørum E (2016)

Single-Fiber Recordings of Nociceptive Fibers in Patients With HSAN Type V With Congenital Insensitivity to Pain

Clin J Pain, 32 (7), 636-42

PubMed 27270876 SFX WOS 000378712600012 Cristin 1437535 (Details)

Salvanos P, Moe MC, Utheim TP, Bragadóttir R, Kerty E (2016)

ULTRA-WIDE-FIELD FUNDUS IMAGING IN THE DIAGNOSIS AND FOLLOW-UP OF SUSAC SYNDROME

Retin Cases Brief Rep (in press)

PubMed 27828899 SFX (Details)

Scheuren R, Duschek S, Schulz A, Sütterlin S, Anton F (2016)

Blood pressure and the perception of illusive pain

Psychophysiology, 53 (8), 1282-91

PubMed 27079150 SFX WOS 000382721300017 Cristin 1351744 (Details)

Schneider C, Cerwenka S, Nieder TO, Briken P, Cohen-Kettenis PT, De Cuypere G, Haraldsen IR, Kreukels BP, Richter-Appelt H (2016)

Measuring Gender Dysphoria: A Multicenter Examination and Comparison of the Utrecht Gender Dysphoria Scale and the Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults

Arch Sex Behav, 45 (3), 551-8

PubMed 26883025 SFX WOS 000371643500011 Cristin 1450523 (Details)

Schorkopf DL, de Sá Filho GF, Maia-Silva C, Schorkopf M, Hrnacir M, Barth FG (2016)

Nectar profitability, not empty honey stores, stimulate recruitment and foraging in *Melipona scutellaris* (Apidae, Meliponini)

J Comp Physiol A Neuroethol Sens Neural Behav Physiol, 202 (9-10), 709-22

PubMed 27316717 SFX WOS 000383469500012 Cristin 1439941 (Details)





Shastri S, Spiewak HL, Sofoluwe A, Eidsvaag VA, Asghar AH, Pereira T, Bull EH, Butt AT, Thomas MS (2016)

An efficient system for the generation of marked genetic mutants in members of the genus *Burkholderia*

Plasmid, 89, 49-56

PubMed 27825973 SFX WOS 000394196300008 Cistin 1461607 (Details)

Simonsen CS, Celius EG, Brunborg C, Tallaksen C, Eriksen EF, Holmøy T, Moen SM (2016)

Bone mineral density in patients with multiple sclerosis, hereditary ataxia or hereditary spastic paraplegia after at least 10 years of disease - a case control study

BMC Neurol, 16 (1), 252

PubMed 27919248 SFX WOS 000389269000001 Cistin 1421173 (Details)

Simonsen CS, Edland A, Berg-Hansen P, Celius EG (2016)

High prevalence and increasing incidence of multiple sclerosis in the Norwegian county of Buskerud

Acta Neurol Scand, 135 (4), 412-418

PubMed 27241360 SFX WOS 000398035900005 Cistin 1438898 (Details)

Skagen K, Evensen K, Scott H, Krohg-Sørensen K, Vatnehol SA, Hol PK, Skjelland M, Russell D (2016)

Semiautomated Magnetic Resonance Imaging Assessment of Carotid Plaque Lipid Content

J Stroke Cerebrovasc Dis, 25 (8), 2004-10

PubMed 27234919 SFX WOS 000380937700034 Cistin 1377892 (Details)

Skagen K, Skjelland M, Zamani M, Russell D (2016)

Unstable carotid artery plaque: new insights and controversies in diagnostics and treatment

Croat Med J, 57 (4), 311-20

PubMed 27586546 SFX WOS 000384783200002 Cistin 1394586 (Details)

Skagen K, Trøseid M, Ueland T, Holm S, Abbas A, Gregersen I, Kummen M, Bjerkeli V, Reier-Nilsen F, Russell D, Svardal A, Karlsen TH, Aukrust P, Berge RK, Hov JE, Halvorsen B, Skjelland M (2016)

The Carnitine-butyrobetaine-trimethylamine-N-oxide pathway and its association with cardiovascular mortality in patients with carotid atherosclerosis

Atherosclerosis, 247, 64-9

PubMed 26868510 SFX WOS 000372718900009 Cistin 1343816 (Details)

Skarpenland T, Dahl TB, Skjelland M, Scheffler K, de Sousa MM, Gregersen I, Kuśnierczyk A, Sharma A, Slupphaug G, Eide L, Segers FM, Skagen KR, Dahl CP, Russell D, Folkersen L, Krohg-Sørensen K, Holm S, Bjørås M, Aukrust P, Halvorsen B (2016)

Enhanced base excision repair capacity in carotid atherosclerosis may protect nuclear DNA but not mitochondrial DNA

Free Radic Biol Med, 97, 386-97

PubMed 27381496 SFX WOS 000381924100035 Cistin 1371747 (Details)





Skarpenland T, Holm S, Scheffler K, Gregersen I, Dahl TB, Suganthan R, Segers FM, Østlie I, Otten JJ, Luna L, Ketelhuth DF, Lundberg AM, Neurauter CG, Hildrestrand G, Skjelland M, Bjørndal B, Svardal AM, Iversen PO, Hedin U, Nygård S, Olstad OK, Krohg-Sørensen K, Slupphaug G, Eide L, Kuśnierczyk A et al. (2016)

Neil3-dependent base excision repair regulates lipid metabolism and prevents atherosclerosis in Apoe-deficient mice

Sci Rep, 6, 28337

PubMed 27328939 SFX WOS 000378224800001 Cistin 1371776 (Details)

Skatteboe S, Roe C, Perrin PB, Dalen H, Bautz-Holter E, Nyquist A, Saebu M (2016)

One-year trajectories of motivation and physical activity in persons with disabilities
J Rehabil Med, 48 (4), 371-7

PubMed 26936650 SFX WOS 000372456100008 Cistin 1378267 (Details)

Skjellegrind HK, Fayzullin A, Johnsen EO, Eide L, Langmoen IA, Moe MC, Vik-Mo EO (2016)

Short-Term Differentiation of Glioblastoma Stem Cells Induces Hypoxia Tolerance
Neurochem Res, 41 (7), 1545-58

PubMed 26915110 SFX WOS 000377474000004 Cistin 1374784 (Details)

Skogen K, Schulz A, Dormagen JB, Ganeshan B, Helseth E, Server A (2016)

Diagnostic performance of texture analysis on MRI in grading cerebral gliomas
Eur J Radiol, 85 (4), 824-9

PubMed 26971430 SFX WOS 000373571900023 Cistin 1367791 (Details)

Slomic M, Christiansen B, Soberg HL, Sveen U (2016)

User involvement and experiential knowledge in interprofessional rehabilitation: a grounded theory study

BMC Health Serv Res, 16 (1), 547

PubMed 27716269 SFX WOS 000384697900006 Cistin 1387862 (Details)

Solbakken G, Ørstavik K, Hagen T, Dietrichs E, Naerland T (2016)

Major involvement of trunk muscles in myotonic dystrophy type 1
Acta Neurol Scand, 134 (6), 467-473

PubMed 26984572 SFX WOS 000386754600010 (Details)

Solbakken G, Ørstavik K, Hagen T, Dietrichs E, Nærland T (2016)

Major involvement of trunk muscles in myotonic dystrophy type 1
Acta Neurologica Scandinavica, 1, 1-7

PublikaID 229 (Details)

Song L, Sandset EC, Arima H, Heeley E, Delcourt C, Chen G, Yang J, Wu G, Wang X, Lavados PM, Huang Y, Stapf C, Wang J, Robinson TG, Chalmers J, Lindley RI, Anderson CS, INTERACT2 Investigators (2016)

Early blood pressure lowering in patients with intracerebral haemorrhage and prior use of antithrombotic agents: pooled analysis of the INTERACT studies

J Neurol Neurosurg Psychiatry, 87 (12), 1330-1335

PubMed 27178897 SFX WOS 000389472700253 Cistin 1454430 (Details)





Soreide E, Granan LP, Hjorthaug GA, Espehaug B, Dimmen S, Nordsletten L (2016)
The Effect of Limited Perioperative Nonsteroidal Anti-inflammatory Drugs on Patients Undergoing Anterior Cruciate Ligament Reconstruction
Am J Sports Med, 44 (12), 3111-3118
PubMed 27496908 SFX WOS 000389905400011 Cristin 1406921 (Details)

Steinmetz JP, Vögele C, Theisen-Flies C, Federspiel C, Sütterlin S (2016)
The relationship between emotion regulation capacity, heart rate variability, and quality of life in individuals with alcohol-related brain damage
Psychol Res Behav Manag, 9, 219-35
PubMed 27616894 SFX WOS 000385195800001 Cristin 1376178 (Details)

Stergiou C, Lazaridis K, Zouvelou V, Tzartos J, Mantegazza R, Antozzi C, Andreetta F, Evoli A, Deymeer F, Saruhan-Direskeneli G, Durmus H, Brenner T, Vaknin A, Berrih-Aknin S, Behin A, Sharshar T, De Baets M, Losen M, Martinez-Martinez P, Kleopa KA, Zamba-Papanicolaou E, Kyriakides T, Kostera-Pruszczyk A, Szczudlik P, Szyluk B et al. (2016)
Titin antibodies in "seronegative" myasthenia gravis--A new role for an old antigen
J Neuroimmunol, 292, 108-15
PubMed 26943968 SFX WOS 000372561600017 Cristin 1370703 (Details)

Storsve AB, Fjell AM, Yendiki A, Walhovd KB (2016)
Longitudinal Changes in White Matter Tract Integrity across the Adult Lifespan and Its Relation to Cortical Thinning
PLoS One, 11 (6), e0156770
PubMed 27253393 SFX WOS 000377218700057 Cristin 1356638 (Details)

Støverud KH, Langtangen HP, Ringstad GA, Eide PK, Mardal KA (2016)
Computational Investigation of Cerebrospinal Fluid Dynamics in the Posterior Cranial Fossa and Cervical Subarachnoid Space in Patients with Chiari I Malformation
PLoS One, 11 (10), e0162938
PubMed 27727298 SFX WOS 000385504400003 Cristin 1403803 (Details)

Sundseth J, Fredrikli OA, Kolstad F, Johnsen LG, Pripp AH, Andresen H, Myrseth E, Müller K, Nygaard ØP, Zwart JA, NORCAT study group (2016)
The Norwegian Cervical Arthroplasty Trial (NORCAT): 2-year clinical outcome after single-level cervical arthroplasty versus fusion-a prospective, single-blinded, randomized, controlled multicenter study
Eur Spine J, 26 (4), 1225-1235
PubMed 28012081 SFX WOS 000399025300033 Cristin 1420531 (Details)

Sundseth J, Jacobsen EA, Kolstad F, Sletteberg RO, Nygaard OP, Johnsen LG, Pripp AH, Andresen H, Fredrikli OA, Myrseth E, Zwart JA (2016)
Heterotopic ossification and clinical outcome in nonconstrained cervical arthroplasty 2 years after surgery: the Norwegian Cervical Arthroplasty Trial (NORCAT)
Eur Spine J, 25 (7), 2271-8
PubMed 27061727 SFX WOS 000378945800033 Cristin 1367960 (Details)





Sundseth J, Sundseth A, Jacobsen EA, Pripp AH, Sorteberg W, Altmann M, Lindegaard KF, Berg-Johnsen J, Thommessen B (2016)
Predictors of early in-hospital death after decompressive craniectomy in swollen middle cerebral artery infarction
Acta Neurochir (Wien), 159 (2), 301-306
PubMed 27942881 SFX WOS 000393022200016 Cristin 1454184 (Details)

Sveen U, Røe C, Sigurdardottir S, Skandsen T, Andelic N, Manskow U, Berntsen SA, Soberg HL, Anke A (2016)
Rehabilitation pathways and functional independence one year after severe traumatic brain injury
Eur J Phys Rehabil Med, 52 (5), 650-661
PubMed 27050083 SFX WOS 000399965500006 Cristin 1377451 (Details)

Sveen U, Sjøberg HL, Østensjø S (2016)
Biographical disruption, adjustment and reconstruction of everyday occupations and work participation after mild traumatic brain injury. A focus group study
Disabil Rehabil, 38 (23), 2296-304
PubMed 27007064 SFX WOS 000381937400005 Cristin 1319439 (Details)

Svendsen T, Brodtkorb E, Reimers A, Molden E, Sætre E, Johannessen SI, Johannessen Landmark C (2016)
Pharmacokinetic variability, efficacy and tolerability of eslicarbazepine acetate-A national approach to the evaluation of therapeutic drug monitoring data and clinical outcome
Epilepsy Res, 129, 125-131
PubMed 28043062 SFX WOS 000394634300021 Cristin 1409585 (Details)

Systad S, Bjørnvold M, Markhus R, Lyster SH (2016)
Watch the language! Language and linguistic-cognitive abilities in children with nocturnal epileptiform activity
Epilepsy Behav, 66, 10-18
PubMed 27984701 SFX WOS 000393361500003 Cristin 1444110 (Details)

Syvertsen M, Hellum MK, Hansen G, Edland A, Nakken KO, Selmer KK, Koht J (2016)
Prevalence of juvenile myoclonic epilepsy in people <30 years of age-A population-based study in Norway
Epilepsia, 58 (1), 105-112
PubMed 27861775 SFX WOS 000393682700014 Cristin 1441407 (Details)

Sørensen PS, Sellebjerg F, Lycke J, Färkkilä M, Créange A, Lund CG, Schlupe M, Frederiksen JL, Stenager E, Pflieger C, Garde E, Kinnunen E, Marhardt K, RECYCLINE Study Investigators (2016)
Minocycline added to subcutaneous interferon β -1a in multiple sclerosis: randomized RECYCLINE study
Eur J Neurol, 23 (5), 861-70
PubMed 26848561 SFX WOS 000374341500009 Cristin 1452930 (Details)





Søyseth TS, Lund MB, Bjørtuft Ø, Heldal A, Søyseth V, Dew MA, Haugstad GK, Malt UF (2016)
Psychiatric disorders and psychological distress in patients undergoing evaluation for lung
transplantation: a national cohort study
Gen Hosp Psychiatry, 42, 67-73
PubMed 27638975 SFX WOS 000384140700013 Cristin 1383083 (Details)

Toft M, Ross OA (2016)
Exome Variant Mining in Familial Parkinson Disease: Will Replication Find the Gold?
JAMA Neurol, 73 (1), 21-2
PubMed 26595415 SFX WOS 000385848500005 (Details)

Tornås S, Løvstad M, Solbakk AK, Evans J, Endestad T, Hol PK, Schanke AK, Stubberud J (2016)
Rehabilitation of Executive Functions in Patients with Chronic Acquired Brain Injury with Goal
Management Training, External Cuing, and Emotional Regulation: A Randomized Controlled Trial
J Int Neuropsychol Soc, 22 (4), 436-52
PubMed 26812574 SFX WOS 000373295300006 Cristin 1333575 (Details)

Tornås S, Løvstad M, Solbakk AK, Schanke AK, Stubberud J (2016)
Goal Management Training Combined With External Cuing as a Means to Improve Emotional
Regulation, Psychological Functioning, and Quality of Life in Patients With Acquired Brain Injury: A
Randomized Controlled Trial
Arch Phys Med Rehabil, 97 (11), 1841-1852.e3
PubMed 27424292 SFX WOS 000387634500003 Cristin 1385901 (Details)

Uglem M, Omland PM, Nilsen KB, Tronvik E, Stovner LJ, Hagen K, Linde M, Sand T (2016)
Does pain sensitivity change by migraine phase? A blinded longitudinal study
Cephalalgia, 333102416679955 (in press)
PubMed 27919023 SFX Cristin 1402099 (Details)

Uhlig T, Bjørneboe O, Krøll F, Palm Ø, Olsen IC, Grotle M (2016)
Involvement of the multidisciplinary team and outcomes in inpatient rehabilitation among patients
with inflammatory rheumatic disease
BMC Musculoskelet Disord, 17, 18
PubMed 26762160 SFX WOS 000368138300002 Cristin 1316628 (Details)

van de Grift TC, Cohen-Kettenis PT, Elaut E, De Cuyper G, Richter-Appelt H, Haraldsen IR, Kreukels
BP (2016)
A network analysis of body satisfaction of people with gender dysphoria
Body Image, 17, 184-90
PubMed 27137814 SFX WOS 000377728500023 Cristin 1397626 (Details)

van Walsem MR, Howe EI, Frich JC, Andelic N (2016)
Assistive Technology for Cognition and Health-related Quality of Life in Huntington's Disease
J Huntingtons Dis, 5 (3), 261-270
PubMed 27689618 SFX Cristin 1385011 (Details)





Varghese M, Bruland O, Wiedswang AM, Lobmaier I, Røsok B, Benjamin RS, Hall KS (2016)
Metastatic mesenteric dedifferentiated leiomyosarcoma: a case report and a review of literature
Clin Sarcoma Res, 6, 2
PubMed 26913180 SFX Cristin 1461617 (Details)

Varghese M, Nymoene HG, Saxhaug C, Krossnes B, Abdol Mohieb Hosainey S, Meling TR, Brandal P (2016)
Symptomatic spinal metastasis from intracranial glioblastoma multiforme - Two illustrative cases and a review of the literature
Acta Oncol, 55 (9-10), 1236-1238
PubMed 27174685 SFX WOS 000385554200026 (Details)

Vikane E, Hellstrøm T, Røe C, Bautz-Holter E, Aßmus J, Skouen JS (2016)
Predictors for Return to Work in Subjects with Mild Traumatic Brain Injury
Behav Neurol, 2016, 8026414
PubMed 26980942 SFX WOS 000371579200001 Cristin 1365353 (Details)

Vindedal GF, Thoren AE, Jensen V, Klungland A, Zhang Y, Holtzman MJ, Ottersen OP, Nagelhus EA (2016)
Removal of aquaporin-4 from glial and ependymal membranes causes brain water accumulation
Mol Cell Neurosci, 77, 47-52
PubMed 27751903 SFX WOS 000389566700005 Cristin 1414835 (Details)

Walhovd KB, Krogsrud SK, Amlien IK, Bartsch H, Bjørnerud A, Due-Tønnessen P, Grydeland H, Hagler DJ, Håberg AK, Kremen WS, Ferschmann L, Nyberg L, Panizzon MS, Rohani DA, Skranes J, Storsve AB, Sølsnes AE, Tamnes CK, Thompson WK, Reuter C, Dale AM, Fjell AM (2016)
Neurodevelopmental origins of lifespan changes in brain and cognition
Proc Natl Acad Sci U S A, 113 (33), 9357-62
PubMed 27432992 SFX WOS 000381399200068 Cristin 1389018 (Details)

Wallace S, Døhlen G, Holmstrøm H, Lund C, Russell D (2016)
Cerebral Microemboli Detection and Differentiation During Transcatheter Closure of Patent Ductus Arteriosus
Pediatr Cardiol, 37 (6), 1141-7
PubMed 27229332 SFX WOS 000381279300021 Cristin 1393634 (Details)

Wang X, Cao Y, Hong D, Zheng D, Richtering S, Sandset EC, Leong TH, Arima H, Islam S, Salam A, Anderson C, Robinson T, Hackett ML (2016)
Ambient Temperature and Stroke Occurrence: A Systematic Review and Meta-Analysis
Int J Environ Res Public Health, 13 (7)
PubMed 27420077 SFX WOS 000380759800074 Cristin 1389467 (Details)





Wang Y, Bos SD, Harbo HF, Thompson WK, Schork AJ, Bettella F, Witoelar A, Lie BA, Li W, McEvoy LK, Djurovic S, Desikan RS, Dale AM, Andreassen OA (2016)
Genetic overlap between multiple sclerosis and several cardiovascular disease risk factors
Mult Scler, 22 (14), 1783-1793
PubMed 26920376 SFX WOS 000390576600007 Cistin 1355155 (Details)

Watne LO, Idland AV, Fekkes D, Raeder J, Frihagen F, Ranhoff AH, Chaudhry FA, Engedal K, Wyller TB, Hassel B (2016)
Increased CSF levels of aromatic amino acids in hip fracture patients with delirium suggests higher monoaminergic activity
BMC Geriatr, 16, 149
PubMed 27484129 SFX WOS 000381732000001 Cistin 1375507 (Details)

Werner EL, Storheim K, Løchting I, Wisløff T, Grotle M (2016)
Cognitive Patient Education for Low Back Pain in Primary Care: A Cluster Randomized Controlled Trial and Cost-Effectiveness Analysis
Spine (Phila Pa 1976), 41 (6), 455-62
PubMed 26966970 SFX WOS 000374786100015 Cistin 1353449 (Details)

Westerhausen R, Fjell AM, Krogsrud SK, Rohani DA, Skranes JS, Håberg AK, Walhovd KB (2016)
Selective increase in posterior corpus callosum thickness between the age of 4 and 11years
Neuroimage, 139, 17-25
PubMed 27288321 SFX WOS 000381583500003 Cistin 1363821 (Details)

Wiedmann MK, Brunborg C, Di Ieva A, Lindemann K, Johannesen TB, Vatten L, Helseth E, Zwart JA (2016)
The impact of body mass index and height on the risk for glioblastoma and other glioma subgroups: a large prospective cohort study
Neuro Oncol (in press)
PubMed 28040713 SFX (Details)

Wojniusz S, Callens N, Sütterlin S, Andersson S, De Schepper J, Gies I, Vanbesien J, De Waele K, Van Aken S, Craen M, Vögele C, Cools M, Haraldsen IR (2016)
Cognitive, Emotional, and Psychosocial Functioning of Girls Treated with Pharmacological Puberty Blockage for Idiopathic Central Precocious Puberty
Front Psychol, 7, 1053
PubMed 27462292 SFX WOS 000379418800002 Cistin 1370066 (Details)

Zimmer S, Grebe A, Bakke SS, Bode N, Halvorsen B, Ulas T, Skjelland M, De Nardo D, Labzin LI, Kerksiek A, Hempel C, Heneka MT, Hawxhurst V, Fitzgerald ML, Trebicka J, Björkhem I, Gustafsson JÅ, Westerterp M, Tall AR, Wright SD, Espevik T, Schultze JL, Nickenig G, Lütjohann D, Latz E (2016)
Cyclodextrin promotes atherosclerosis regression via macrophage reprogramming
Sci Transl Med, 8 (333), 333ra50
PubMed 27053774 SFX WOS 000374240300005 Cistin 1367729 (Details)





Züchner M, Glover JC, Boulland JL (2016)
A Neonatal Mouse Spinal Cord Compression Injury Model
J Vis Exp (109), e53498
PubMed 27078037 SFX WOS 000374636300019 Cistin 1367436 (Details)

Aaberg KM, Bakken IJ, Lossius MI, Lund Sjøraas C, Håberg SE, Stoltenberg C, Surén P, Chin R (2016)
Comorbidity and Childhood Epilepsy: A Nationwide Registry Study
Pediatrics, 138 (3)
PubMed 27482059 SFX WOS 000384002100040 Cistin 1378959 (Details)

Åsberg AN, Stovner LJ, Zwart JA, Winsvold BS, Heuch I, Hagen K (2016)
Chronic musculoskeletal complaints as a predictor of mortality-The HUNT study
Pain, 157 (7), 1443-7
PubMed 26919487 SFX WOS 000378876600010 Cistin 1352646 (Details)

