Akershus universitetssykehus

Research activity and resource use

Akershus University Hospital 2013

UNIVERSITETET I OSLO

HELSE SØR-ØST

Index

Introduction

The results of this report on research activity at Akershus University Hospital (Ahus) in 2013 are taken from CRIStin (Current Research Information System In Norway). This database contains scientific publications that pay off in the performance-based funding systems for research.

The report also presents an overview of employees at Ahus who defended their doctoral thesis in 2013. This overview is based on reporting to NIFU (Nordic Institute for Studies in Innovation, Research and Education).

Furthermore, the report provides an overview of the number of publishing researchers and their research production, the researchers' gender and age composition, as well as which partners the researchers have nationally and internationally.

In addition to doctoral degrees and publications, the allocation of research funding is an important measurement parameter for research. The report therefore contains an overview of which researchers and research groups have been awarded internal and external funding based on competition.

At the beginning of the report, a brief description of the research organisation and use of resources for research at Ahus is given.

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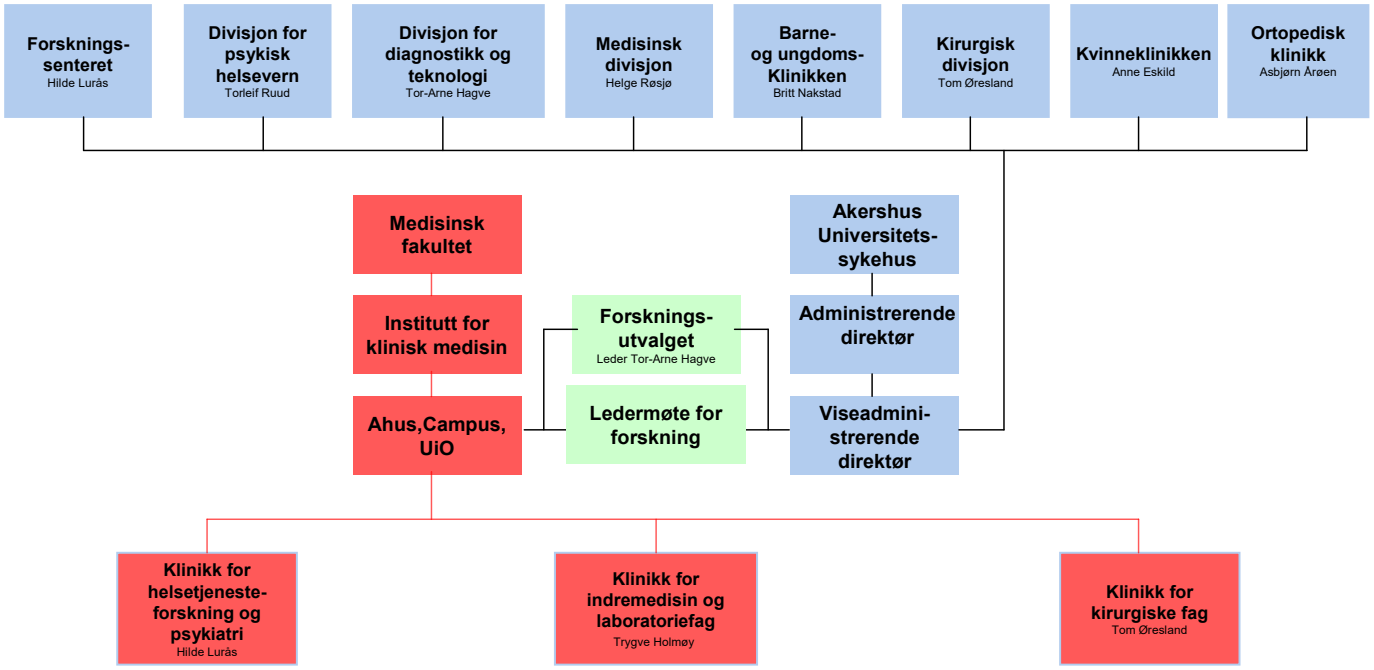
1. Organisation and use of resources

As Figure 1 shows, the research activity at Ahus is organizationally linked to two different reporting lines; The University of Oslo (UiO) (red) and Ahus (blue). In terms of management, the two lines meet both in that the leaders of the three UiO clinics have shared positions, at a joint management meeting for research (bottom green box) and a joint research committee (top green box). The joint research committee is based on the Collaboration Agreement between UiO and Ahus.

Figure 1: Organisation of research at Ahus



In 2013, the total use of resources for research at Ahus amounted to 122 full-time equivalents. This is distributed among 300 research professionals as a result of the fact that most have combined positions with clinics. In addition, UiO finances almost 30 man-years at the hospital. Ahus has two combined positions with Oslo and Akershus University College (HiOA), one in the Division of Mental Health and one in the Department of Health Services Research. The centrally located research funding is partly funded from UiO and partly from Ahus and amounts to a total of 15.5 full-time equivalents distributed among 20 people. Research support includes libraries, data capture, statistics, biobank, and administrative services.

Table 1 provides an overview of how these full-time equivalents are distributed by division. For example, if we look at the column for the Division of Diagnostics and Technology (DDT), that division has a total of 2.4 UiO full-time equivalents and 12.8 Ahus full-time equivalents distributed among 32 people. Furthermore, we see that 29 of the full-time equivalents are internally financed, while three are financed externally. Most of the external resources allocated to the research projects are funded by the South-Eastern Norway Regional Health Authority. Similar information for the other divisions can be found in the columns to the right. These figures are based on reports to NIFU for 2013 and have therefore not taken care of the reorganisation process where the Orthopaedic Department became a separate clinic from 1 January 2014. There are currently 19 active research groups at Ahus. An overview of these groups can be found in the appendix.

Table 1: Divisional distribution of full-time equivalents (persons) - 2013

	DDT	PSYK	KIR	MED	KK	BUK	HØKH	Forsknings-støtte	Adm
Internally Funded	11,7 (*29*)	13,8 (*25*)	7,2 (*42*)	26,1 (*92*)	1,5 (*2*)	1,6 (*7*)	3,2 (*6*)	5,5 (*10*)	3 (*3*)
Externally funded	1,1 (*3*)	8,4 (*17*)	1,3 (*5*)	20 (*40*)	5,4 (*13*)	1,7 (*7*)	19,7 (*40*)		
Ahus total	**12,8**	**22,2**	**8,5**	**46**	**7**	**3,3**	**23**	**5,5**	**3**
UiO total	**2,4**	**0,9**	**8,5**	**13**	**1,4**	**2,1**	**1,6**	**3**	**4**

DDT: Division of Diagnostics and Technology
PSYK: Division of Mental Health
KIR: Division of Surgery
MED: Division of Medicine
KK: Division of Gynaecology and Obstetrics
BUK: Division of Paediatric and Adolescent Medicine
HØKH: Health Services Research Unit

2. Doctoral degrees

Table 2 provides an overview of the ten employees at Ahus who defended their thesis in 2013, while Table 3 shows an overview of the number of doctoral degrees per division.

Table 2: Employees at Ahus who defended their thesis in 2013

Candidate	Main supervisor	Division	Title
Harald Hrubos -Strøm	Toril Dammen	Division of Surgery	Obstructive Sleep Apnea in Community-Dwelling Adults. A Clinical-Epidemiological Study. Akershus Sleep Apnea Project (ASAP)
Petr Ricanek	Andreas Rydning	Division of Medicine	Characterization of clinical, microbial, and epithelial barrier parameters in newly diagnosed IBD patients
Lene Berge Holm	Fredrik A Dahl	Health Services Research Unit	Combining Soft Systems Methodology and Discrete Event Simulation modelling for optimising hospital patient flow and resource utilisation
Margit Leonie Hesla Riis	Vessela Kristensen	Division of Surgery	Molecular Analysis of Pre- and Postoperative Biopsies in Breast Cancer Progression
Ingrid Nermoen	Kristian Løvås	Division of Medicine	Congenital Adrenal Hyperplasia in Adults: Epidemiological, Genetic, Clinical and Endocrine Features of CYP21A2 Deficiency in Norway
Nina Hasselberg	Torleif Ruud	Division of Mental Health, R&D department	The crisis resolution team model in Norway: Implementation, outcome of crisis and admissions
Inge Skråmm	Geir Bukholm	Division of Surgery	Infections after Orthopedic Surgery. Molecular epidemiology of Staphylococcus aureus and efficacy of surveillance
Arne Didrik Høiseth	Vidar Søyseth	Division of Medicine	Myocardial injury and stress during acute exacerbation of chronic obstructive pulmonary disease – a prospective cohort study
Kristin Kaasen Jørgensen	Kirsten Muri Boberg	Division of Medicine	Inflammatory Bowel Disease in Primary Sclerosing Cholangitis Clinical Characteristics in Liver Transplanted and Non-Transplanted Patients
Ying Wang	Knut Stavem og Torbjørn Saksenvik Haugen	Health Services Research Unit	Acute exacerbation of COPD: length of hospital stay, readmission rates and patient's experience of a hospital at the home program - A combined quantitative and qualitative approach

Table 3: Number of public defenses per division

	Number
Division of Medicine	4
Health Services Research Unit (HØKH)	2
Division of Surgery	3
Division of Mental Health	1

3. Publications

Scientific publication channels for health trusts are ranked in two quality levels:

- Level 1: Approved scientific publication channels (1 point)
- Level 2: Specially reputable scientific journals (3 points)

In connection with the reporting to CRIStin, Ahus has a total of 228 articles. Table 4 shows the total number of scientific articles distributed between level 1 and level 2. In total, 22% of the articles from Ahus are at level 2. This corresponds to the share in 2012.

Table 4: Number of scientific publications by level and total at Ahus.

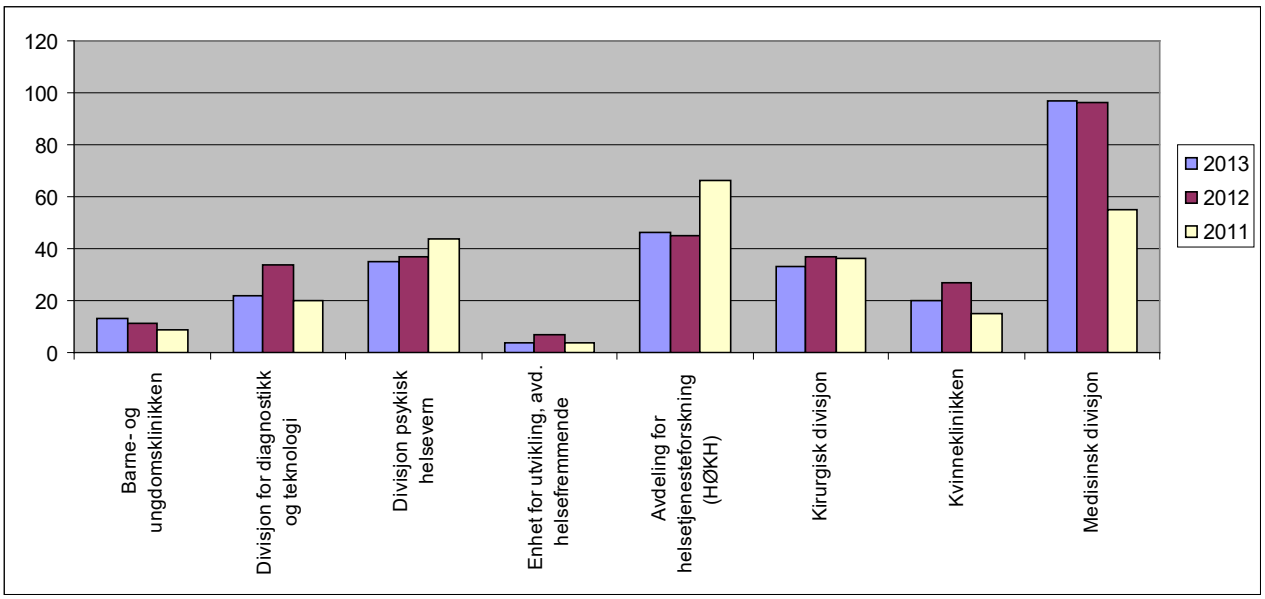
Level 1		Level 2	
Number	%	Number	%
178	78	50	22

Table 5 shows an overview of scientific articles by division, while Figure 2 shows the divisional development over the past three years.

Table 5: Scientific publications by division at Ahus

	Total	Level 1	Publ.points	Level 2	Publ.points
Division of Paediatric and Adolescent Medicine	13	10	2,2162	3	2,4750
Division of Diagnostics and Technology	22	21	5,6561	1	0,4166
Division of Mental Health	35	32	7,8204	3	1,6458
Enhet for utvikling, avd. helsefremmende	4	4	0,4444		
Health Services Research Unit (HØKH)	46	33	11,2100	13	15,4013
Division of Surgery	33	30	8,0435	3	5,3303
Division of Gynaecology and Obstetrics	20	10	3,3652	10	9,9202
Division of Medicine	97	79	21,0945	18	9,9039

Figure 2: Divisional development in publications over the last three years.



4. Publications and doctoral degrees last five years

Tables 6 and 3 and 4 provide an overview of publications and doctoral degrees from 2008 to 2013. From 2012 to 2013 there has been a decline of ten publications, or about 4%. The number of doctoral degrees has halved from 2012 to 2013 and is now on a par with 2010. This type of fluctuation from one year to the next is not uncommon in research.

Table 6: Number of publications and doctoral degrees last 5 years

	2008	2009	2010	2011	2012	2013
Publications	108	107	130	210	238	228
Doctoral Degree	5	7	10,5	8	20	10

Figure 3: Development in the number of publications

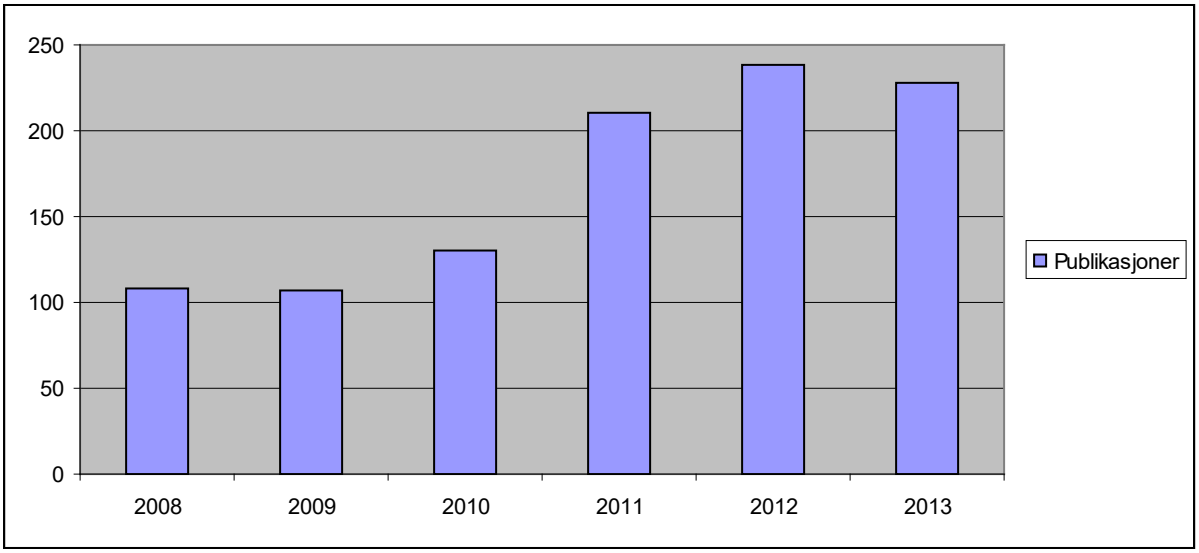
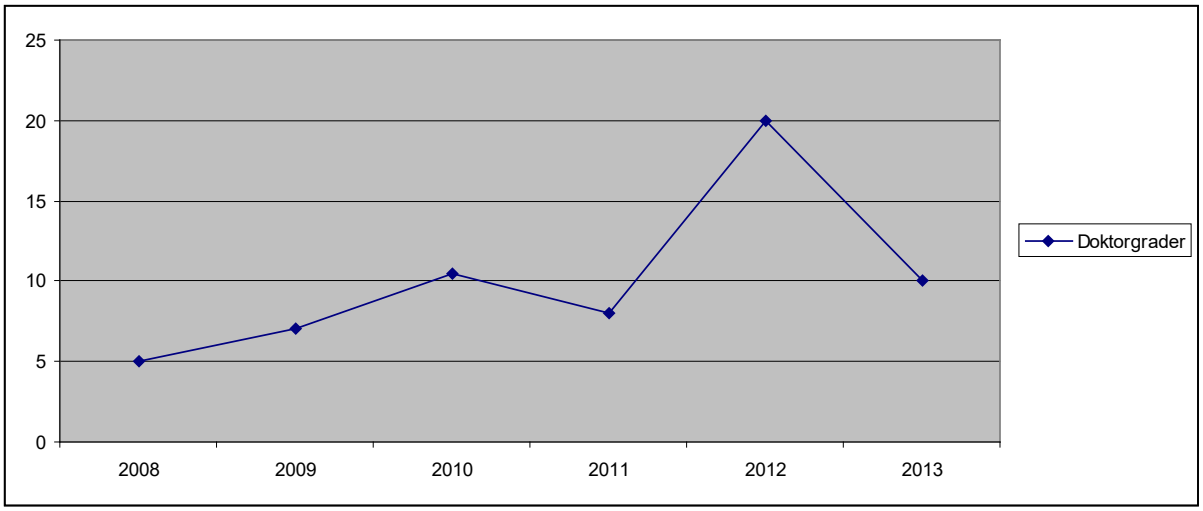


Figure 4: Development in the number of doctoral degrees



5. Publishing researchers

The tables below show the number of researchers who have published at least one scientific article with Ahus as the author address based on data obtained from CRIstin.

Table 7 shows publishing researchers by gender and age, while Table 8 shows a similar overview per division.

Table 7 shows publishing researchers by gender and age, while Table 8 shows a similar overview per division.

Men		Women		Total	
Number	Age	Number	Age	Number	Age
97	47,1	105	44,6	202	45,8

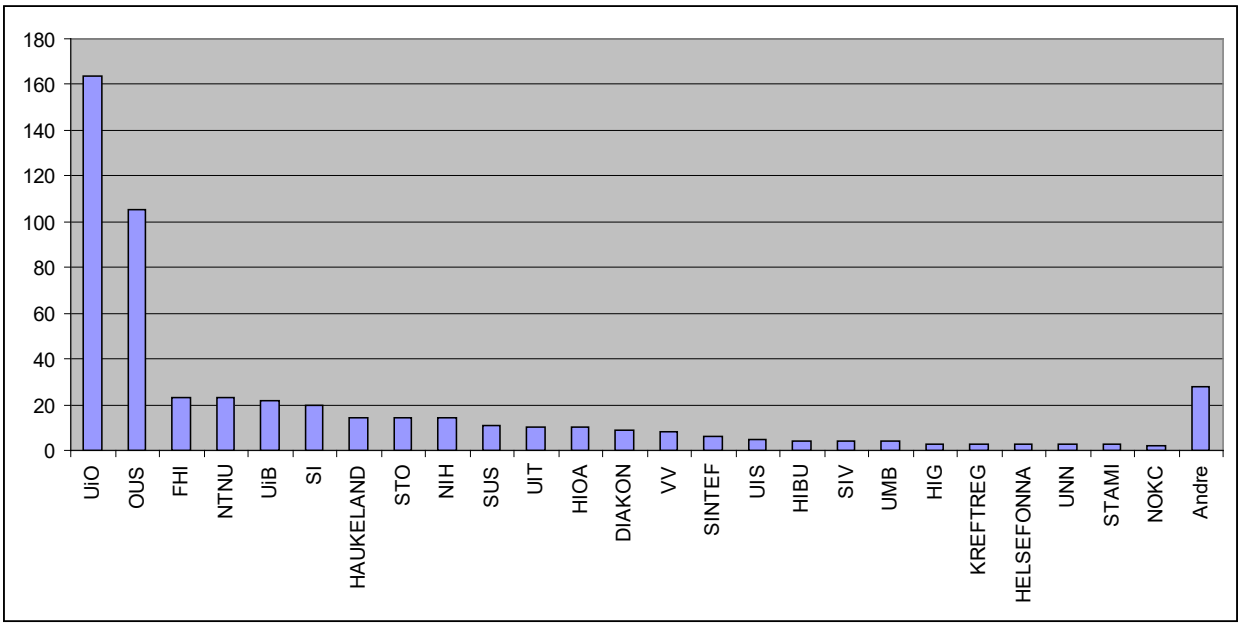
Table 8: Publishing researchers by sex and age by division

	Men		Women	
	Number	Age	Number	Age
Division of Paediatric and Adolescent Medicine	4	43,8	12	38,5
Division of Diagnostics and Technology	15	47,1	14	46,4
Division of Mental Health	11	46,8	15	49,5
Enhet for utvikling, avd. Helsefremmende	0		2	63,0
Health Services Research Unit	12	44,5	16	46,8
Division of Surgery	23	47,6	3	47,0
Division of Gynaecology and Obstetrics	1	56,0	16	43,4
Division of Medicine	31	47,9	27	41,6

6. National cooperation

Figure 5 shows an overview of Norwegian institutions that researchers at Ahus publish with. Naturally, co-publication with UiO and Oslo University Hospital (OUS) is most common.

Figure 5: Co-publication with Norwegian institutions



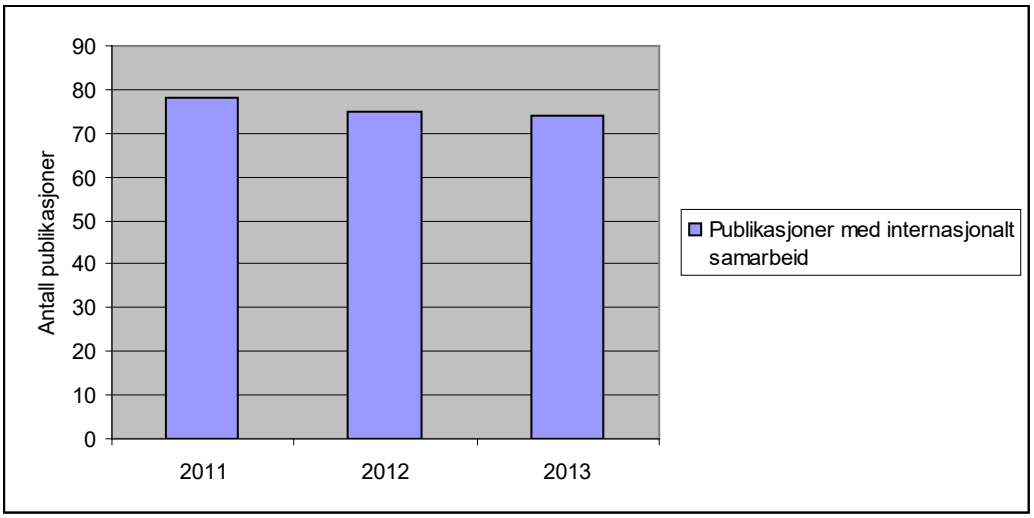
Beskrivelse av forkortelsene i figuren ovenfor:

- UiO – University of Oslo
- OUS – Oslo University Hospital
- NIPH – Norwegian Institute of Public Health
- NTNU – Norwegian University of Science and Technology
- UiB – University of Bergen
- SI – Innlandet Hospital Trust
- HAUKELAND - Haukeland University Hospital
- STO – St Olav Hospital
- NIH – Norwegian School of Sport Sciences
- SUS – Stavanger University Hospital
- UiT – University of Tromsø
- HiOA – Oslo and Akershus University College
- DEACON – Diakonhjemmet
- VV – Vestre Viken Hosptial Trust
- SINTEF
- UiS – University of Stavanger
- HIBU – Buskerud University College
- SIV – Vestfold Hospital Trust
- UMB – Norwegian University of Life Sciences
- HIG – Gjøvik University College
- Kreftreg – Cancer Registry of Norway
- Health Fonna
- UNN – University Hospital of North Norway
- STAMI – National Institute of Occupational Health
- NOKC – Norwegian Knowledge Centre for the Health Services

7. International cooperation

International cooperation is important for research communities. In 2013, almost 74 articles, or 33% of the published articles were co-publication with international partners. As Figure 6 shows, the number of articles that include international cooperation has been at this level over the past three years.

Figure 6: Number of publications from Ahus with international cooperation



8. Grant of external research funding Ahus and Campus Ahus

Table 11 provides an overview of research projects that in 2013 were granted external research funding for Ph.D. candidates, post-doc research fellows, or larger operating grants, while Table 12 provides an overview of smaller grants from external sources.

Table 11: Projects granted external research funding to PhD candidates, postdoctoral fellows, and larger operating grants.

Project title	Manager	Division	Funded by:
Menstrual migraine. A genetic epidemiological survey	Michael Bjørn Russell	Head and Neck Research Group	South-Eastern Norway Regional Health Authority
The OxyTarget Study – Merging Functional MRI and Circulating Biomarkers for Biopsy-Free Detection of Chemoradiotherapy Resistant Rectal Cancer	Kathrine Røe	Division of Medicine	South-Eastern Norway Regional Health Authority
Biological responses to hypoxia; population studies of human pregnancy	Anne Eskild	Division of Gynaecology and Obstetrics	South-Eastern Norway Regional Health Authority
Magnetic Resonance Imaging of the bowel and bile ducts in patients with longstanding inflammatory bowel disease: estimate of disease extent and severity with evaluation of prognostic risk factors. The Ibsen cohort	Anne Negård	Division of Diagnostics and Technology	South-Eastern Norway Regional Health Authority
Treatment outcomes in patients with Achilles tendon rupture: A prospective randomized trial comparing conservative treatment with open and mini-invasive surgery	Sigurd Erik Hoelsbrekken	Division of Surgery	South-Eastern Norway Regional Health Authority
Characterisation of a possible target for specific immunotherapy in multiple sclerosis	Trygve Holmøy	Division of Medicine	South-Eastern Norway Regional Health Authority
The pathophysiology of chromogranin A in cardiac disease	Helge Røsjø	Division of Medicine	South-Eastern Norway Regional Health Authority
Family-based treatment of depression: A randomized controlled trial with clinic-referred adolescents	K Pravin Israel	Division of Mental Health (R&D department, Division of Mental Health Services)	South-Eastern Norway Regional Health Authority
Identifying the risk-benefit profile of antipsychotics in elderly people with dementia	Dag Aarsland	Division of Mental Health (R&D department, Division of Mental Health Services)	South-Eastern Norway Regional Health Authority
Pelvic girdle pain after delivery: prognostic factors and consequences	Malin Eberhard-Gran	Health Services Research Unit	South-Eastern Norway Regional Health Authority
Variation in placental weight: causes and consequences	Anne Eskild	Division of Gynaecology and Obstetrics	South-Eastern Norway Regional Health Authority
OxyART – Actionable Radiotherapy Targets in hypOxic Tumors	Anne Hansen Ree	Division of Medicine	South-Eastern Norway Regional Health Authority

Project title	Manager	Division	Funded by:
Towards Alzheimer's disease intervention: Measuring Abeta mid-domain proteolysis	Tormod Fladby	Division of Medicine	South-Eastern Norway Regional Health Authority
Shared Care (samarbeidsprosjekt)	Torleif Ruud og Jorunn Rugkåsa	Health Services Research Unit og Division of Mental Health (R&D department, Division of Mental Health Services)	South-Eastern Norway Regional Health Authority
NASATS NevroNor - Dementia Disease Initiation	Tormod Fladby	Division of Medicine	South-Eastern Norway Regional Health Authority
Karlegging av pasienters alkoholbruk	Christoffer Lundqvist.	Health Services Research Unit and Division of Mental Health (R&D department, Division of Mental Health Services)	South-Eastern Norway Regional Health Authority
Day surgery versus hospitalisation for ankle fractures – surgical complications, functional outcome, and cost	Ulf E Sigurdsen	Orthopedic Clinic	Sophies Minde
MetAction - a collaborative project with OUS. OUS is the project manager	Anne Hansen Ree	Division of Medicine	The Research Council of Norway
224944 A Diagnostic test for Alzheimers disease (samarbeidsprosjekt med Inven2).	Tormod Fladby	Division of Medicine	The Research Council of Norway
Patterns and mechanisms of brain atrophy in healthy aging and dementia. Samarabeidsprosjekt Psykologisk instiutt, UiO	Tormod Fladby	Division of Medicine	The Research Council of Norway
CFS/ME Disease mechanisms in chronic fatigue syndrome/myalgic encephalomyelitis: an integrated, translational approach	Vegard Bruun Wyller	Division of Paediatric and Adolescent Medicine	The Research Council of Norway
Conditions for Change of Practice for the Introduction of Electronic Nursing and Care Reports in the Health Sector (BEPPLO)	Hilde Lurås	Health Services Research Unit	The Research Council of Norway
305676 Inflammatory Bowel Disease Characterization by a Multi-modal Integrated Biomarker Study (EU) 1	Morten Vatn	Division of Internal Medicine and Laboratory Sciences	EU

[1] Project administered by Institute of Clinical Medicine, Campus Ahus

Table 12: Projects granted minor operating grants etc. from external funding sources

Project title	Manager	Division	Funded by:
The pathophysiology of CgA in cardiac disease	Helge Røsjø	Division of Medicine	National Association
Double investigation study	Peter Lauritzen	Division of Diagnostics and Technology	The Norwegian Radiology Fund - Scholarship from Haakon and Sigrun Ødegaard's fund
Efficacy of cava filter vs. standard thromboprophylaxis in multi-trauma patients: A comparative study between Oslo and Mayo Clinic (USA)	Thien Trung Tran	Division of Diagnostics and Technology	The Norwegian Radiology Fund - Scholarship from Haakon and Sigrun Ødegaard's fund
Equine-related trauma treatment	Marianne Kloumann	Division of Mental Health	Health and rehabilitation, Horses and health
Microfractures technique vs. mosaicplasty for focal cartilage injuries in the knee. A randomised multicentre study with 5-11 years of follow-up	Svend Ulstein	Orthopedic Clinic	Sophies Minde
The senior study - wrist fracture. A retrospective study	Ola Lars Hammer	Orthopedic Clinic	Sophies Minde
Treatment and functional outcomes in patients with femoral neck fractures in a malaligned position under 70 years of age	Stefan Bartels	Orthopedic Clinic	Sophies Minde.
Detection of aggressive bowel cancer with new functional MRI abildation	Kathrine Røe	Division of Medicine	Olav Raagholt and Gerd Meidel Raagholt's Foundation for Research
Quality registry ankle fractures, fracture classification, patient outcomes, and treatment complications	Stein Erik Utvåg	Orthopedic Clinic	The Norwegian Medical Association
Akershus Sleep Apnea Diagnostic and Treatment Evaluation (ASADaTE)	Harald Hrubos-Strøm	Division of Surgery	Norwegian Competence Center for Sleep Disorders - SOVno

9. Grant of internal research funding

Once a year, internal strategic research funding is announced that employees at Ahus and Campus Ahus can apply for. The applications are assessed by external experts who provide an overall assessment of the quality of the individual application, and view this in the context of the hospital's strategic development plan and the professional and research strategy.

In accordance with adopted procedures, applications where both external experts consider the application to be *strongly* recommended or *recommended* will be granted. The allocation amount varies between NOK 100,000 and NOK 250,000 per project. Applicants are also encouraged to use peer feedback to improve their applications when applying for research funding from the South-Eastern Norway Regional Health Authority and other external sources.

In 2013, a total of NOK 28.8 million was applied for, divided into 86 applications. 34 projects were awarded funding and the sum awarded was NOK 6 million.

Table 13: Projects awarded internal research funding 2013

Project title	Manager	Department
The impact of hospital quality and parent resources on infant health	Anne Eskild	Division of Gynaecology and Obstetrics
Surgical treatment of femoral neck fractures in a good posture in patients 70 years of age and older: A prospective randomised controlled trial comparing internal fixation with hemiprosthesis screws	Stein Erik Utvåg	Department of Orthopaedics
Volar-locked plating versus bridging external fixation	Jan Erik Madsen	Department of Orthopaedics
Children hospitalised with respiratory syncytial virus (RSV) infection	Anne Lee Solevåg	Division of Paediatric and Adolescent Medicine
Inflammatory bowel disease in children - prognostic factors and treatment effects of infliximab	Morten Vatn	EpiGen - Division of Paediatric and Adolescent Medicine
Effect of Statin Therapy on Vasodilation Ability, Inflammation Markers, and Lung Function in Patients with Stable Chronic Obstructive Pulmonary Disease	Torbjørn Omland	Division of Medicine
Risk factors and cognitive function in Norwegian kidney transplant recipients	Henning Værøy	R&D department, Division of Mental Health Services
Educational attainment, lifestyle factors and gene-environmental interactions in dementia (EL-GENIDEM)	Astrid Liv Mina Bergem	Department of Old-Age Psychiatry
Causes of community-acquired pneumonia in a Norwegian paediatric population	Britt Nakstad	Division of Paediatric and Adolescent Medicine
Prevention of cardiac dysfunction during adjuvant breast cancer therapy (PRADA). 1 års oppfølging	Torbjørn Omland	Division of Medicine
The pathophysiology of secretoneurin in heart failure	Torbjørn Omland	Division of Medicine
The methylation profile of normal breast tissue and benign neoplasia: what can it tell us about breast cancer susceptibility and outcome?	Vessela N Kristensen	EpiGen

Project title	Manager	Department
Prevention of cardiac dysfunction during adjuvant breast cancer therapy (PRADA). An observational substudy	Torbjørn Omland	Division of Medicine
Next-generation sequencing at Ahus: Studying the clinical implications of somatic mutation of breast cancer using the MiSeq personal sequencer from Illumina	Vessela N Kristensen	EpiGen
Mutation detection in malignant melanoma using the Ion Torrent Ion AmpliSeq Cancer panel	Vessela N Kristensen / Toreben Lüders	EpiGen
Treatment outcomes in patients with Achilles tendon rupture: A postoperative randomised trial comparing conservative treatment with an open and mini-invasive surgery	Sigurd Erik Hoelsbrekken	Department of Orthopaedics
MetAction - Actionable Targets in Cancer Metastasis - from Bed to Bench to Byte to Bedside	Anne Hansen Ree	Department of Oncology
Extent and severity of bowel and bile duct pathology after 20 years of inflammatory bowel disease with evaluation of prognostic risk factors; In collaboration with the IBSEN - 20 years follow-up study	Anne Negård	Department of Radiology
Mesenchymal Stem Cells in Clinical Approach to Regenerate Injured Articular Cartilage	Asbjørn Årøen	Department of Orthopaedics
Aβ42 phagocytic assay	Tormod Fladby	Department of Neurology
White matters in dementia trajectory modification: interaction between Alzheimer's and cerebrovascular disease white matter pathology	Tormod Fladby	Department of Neurology
Dupytren's disease study	Per Henrik Randsborg	Department of Orthopaedics
A Systematic Approach of Cytokine/Chemokine Production and relation with cardiac biomarkers in Patients with End-Stage Renal Disease Ongoing Hemodialysis	Lilian Monica Bivol	Department of Renal Medicine
Language barriers in health care: Communication analysis to improve patient comprehension of instructions	Pål Gulbrandsen	Health Services Research Unit
Non-Invasive Detection of the Radioresistant Phenotype in Rectal Cancer by Functional MRI	Kathrine Røe	Department of Oncology
Enhancing Radiotherapy Response in Rectal Cancer by Targeting Tumor Hypoxia	Kathrine Røe	Department of Neurology
miRNA profiling in metastatic malignant melanoma: Identification of potential biomarkers and /or targets for therapy	Vessela N Kristensen	EpiGen
Integrated Molecular Profiles of Invasive Breast Tumors: Prognostic and Predictive Power of Differential Vascular and Interleukin Signaling in Breast Cancer	Vessela N Kristensen	EpiGen
Predictors of cognitive and emotional symptoms three months after stroke	Ramune Grambaite	Department of Neurology
Novel biomarkers in inflammatory bowel disease	Andreas Rydning	Department of Gastroenterology

Project title	Manager	Department
Treatment of focal fractures of the knee: Microfracture technique vs. Mosaicplasty. A prospective randomised trial with 6-10 years of follow-up	Asbjørn Årøen	Department of Orthopaedics
Sacral Fractures - Long Term Outcome	Olav Røise	Department of Orthopaedics
Correlation between BMI, inflammation, and histopathological and prognostic factors for colorectal cancer	Ida Bukholm	Dept. of Breast Endocrine Surgery
A study of hyaluronan and Toll-like receptors 2 and 4 in cord blood from neonates at risk of sepsis	Britt Nakstad	Division of Paediatric and Adolescent Medicine

10. Outstanding Research Award

In June each year, the Managing Director awards the Outstanding Research Prize to three articles with authors from Ahus. An important purpose of this celebration is to highlight what good research is produced and published at Ahus. Based on the publication overview, the Joint Research Committee recommends which articles should be awarded the prize based on publication points/impact factor. The laureate receives flowers, a diploma, and prize money (NOK 10,000) for operations such as conference attendance, etc.

1. Aina Holmen, Juuhl-Langseth M, Thormodsen R, Ueland T, Agartz I, Sundet K, Andreassen OA, Rund BR, Melle I. *Executive function in early- and adult-onset schizophrenia. Tidsskrift: Schizophrenia Research.* 2012 Dec;142(1-3):177-82. doi: 10.1016/j.schres.2012.10.006. Epub 2012 Oct 25.

Schizophrenia is a serious mental disorder with potentially major and devastating consequences for those affected. The onset of the disorder most often occurs in early adulthood. The prevalence of schizophrenia starting before the age of 18 is estimated at approximately 4 % of all schizophrenia diagnoses. Early-onset schizophrenia has been regarded as a more serious condition than schizophrenia, which presents late in terms of symptom severity, functional level, and quality of life.

The prevailing understanding that adolescents with schizophrenia have poorer cognitive functioning than adults at the onset of the disease has not been studied to any great extent. We therefore chose to investigate one of the most important cognitive functions, the executive function (planning, reasoning, problem solving) in two groups; adolescents and adults with schizophrenia. Somewhat surprisingly, we found that adolescents and adults are at the same level when it comes to executive functioning. Both groups perform worse on this function than their peers without a diagnosis of schizophrenia, but adolescents do not function worse than adults when corrected for age.

This finding challenges previous assumptions that people with early-onset schizophrenia have greater cognitive difficulties, and may mean that the adult and adolescent groups are more similar than first thought. The results can help reduce negative expectations and reduce stigma for this group.

2. Antje Sundseth, Thommessen B, Rønning OM. *Outcome After Mobilization Within 24 Hours of Acute Stroke A Randomized Controlled Trial. Tidsskrift: Stroke.* 2012 Sep;43(9):2389-94. doi: 10.1161/STROKEAHA.111.646687. Epub 2012 Jun 14.

Stroke is one of the most frequent causes of death after heart disease and cancer in the Western world, and leads to severe functional impairment in adults. Every year, about 15,000 Norwegians suffer a stroke. Demographic development implies an expectation of a 50% increase in the number of strokes over the next 20 years.

Organised interdisciplinary acute stroke treatment in stroke units reduces the risk of death, increases the proportion of self-reliant patients, and reduces the need for nursing home space. Several factors, among them early mobilization, contribute to the positive effect of treatment in the stroke unit. However, little is known about when mobilisation after an acute stroke should start.

We conducted a blinded randomised controlled trial to assess the effect of very early mobilisation (within 24 hours of hospital admission) compared to mobilisation between 24 to 48 hours.

A total of 65 patients with acute stroke participated in the study. The results showed a tendency towards poorer outcomes, higher death rates, greater dependence, and less improvement in neurological function in those very early mobilised. However, because our study is small, it is not possible to draw firm conclusions.

3. Helge Røsjø, Kravdal G, Høiseth AD, Jørgensen M, Badr P, Røysland R, Omland T.
Troponin I Measured by a High-Sensitivity Assay in Patients with Suspected Reversible Myocardial Ischemia: Data from the Akershus Cardiac Examination (ACE) 1 Study. Tidsskrift: Clinical Chemistr. 2012 Nov;58(11):1565-73. doi: 10.1373/clinchem.2012.190868. Epub 2012 Sep 20.

Heart-specific troponin I and T are blood tests used to diagnose myocardial infarction, i.e. death of heart muscle cells. However, it is controversial whether troponin in the bloodstream can rise in myocardial ischemia, which is assumed not to induce cell death (reversible ischaemia). A study from the Cardiothoracic Research Group, Akershus University Hospital published in the leading journal Clinical Chemistry now helps shed light on this.

In the Akershus Cardiac Examination (ACE) 1 Study, concentrations of troponin I and T in the bloodstream were measured using highly sensitive methods in 198 patients referred for nuclear medicine cardiac examination with a work test (bicycle load). Patients with reversible myocardial ischaemia had higher levels in their blood of troponin I and T prior to workload, but less increase in concentration after workload than participants without myocardial ischaemia. We found a close correlation between variables associated with structural changes in heart muscle (myocardial model modeling) and high troponin levels. Thus, our data do not support the hypothesis that reversible myocardial ischaemia results in the release of troponin molecules into the bloodstream, but rather suggest the myocardial model as the reason why patients with chronic heart disease may have high concentrations of troponin I and T in the bloodstream. We and our collaborating partners have previously also shown an association between myocardial drew modelling and increased troponin concentrations in patients with severe aortic stenosis and the general population. This is consistent with the fact that high troponin T concentrations are an independent predictor of death and development of heart failure in patients with stable coronary artery disease, but not new myocardial infarction.

Clinically, doctors must be aware of the relationship between myocardial model modelling and high troponin concentrations, since measurement of troponin is now performed on large patient groups in hospitals and increasingly also outside hospitals. A patient with a high troponin concentration without classic symptoms of acute coronary syndrome or a typical rise and/or fall in troponin concentration may therefore benefit from an echocardiographic examination of the heart's anatomy and function.

11. Subject and research day for the population

The annual Academic and Research Day was held for the fifth time on 23 April. An important purpose is to create a good reputation for the hospital. The day was marketed widely with the distribution of leaflets in mailboxes and public places, the use of newspapers/media, and locally at the hospital (roll-ups, etc.).

The program for 2013 was based on the hospital's strategic development plan.

There were about 150 people in attendance in the auditorium.

Menneskelig nær – faglig sterk

PROGRAM

Tirsdag 23. april 2013

kl 18.00 – 20.30

Auditoriet Akershus universitetssykehus HF

18:00 – 18:05
Velkommen til Akershus universitetssykehus HF
Hilde Lurås, Forskningssjef/førsteamanuensis
Enhet for forskning og pasientsikkerhet/
Helsetjenesteforsikring

18:10 – 18:25
Hva betyr det å involvere pasienten i beslutninger om behandling?
Pål Gulbrandsen, Professor/seniorforsker
Enhet for forskning og pasientsikkerhet/
Helsetjenesteforsikring

18:30 – 18:45
PRADA - forskningsprosjekt om hjerte og brystkreft på Ahus
Geeta Gulati, Lege i spesialisering/stipendiat
Medisinsk divisjon/Hjerteavdelingen

18:50 - 19:05
Snorking og søvnapné: - Hvem bør utredes?
Harald Hrubos-Strøm, Lege i spesialisering, PhD
Kirurgisk divisjon/Avdeling for øre/nese/hals

19:10 - 19:25
Fremskritt og utfordringer innen behandling av lårhalsbrudd hos eldre
Filip C. Dolatowski, Lege i spesialisering/stipendiat
Kirurgisk divisjon/Ortopedisk avdeling

19:30 – 19:45
Inkludert og involvert? - familiefokus i de psykiske helsetjenestene
Bente M. Weimand, Forsker/Psykiatrisk sykepleier, PhD
Forskning og utvikling, Psykisk helsevern

19:50 - 20:05
Dagens behandling av Type 2 diabetes med vekt på nye prinsipper
Kari Lima, Overlege og endokrinolog, PhD
Medisinsk divisjon/Endokrinologi

20:10 - 20:25
Årsaker til hjerteinfarkt - gammel erfaring og nye teorier
Gunnar Einvik, Lege i spesialisering/Postdoktor, PhD
Medisinsk divisjon

Appendix: Research groups

The following research groups were active as of December 2013. Research group leader in parentheses.

- **Division of Surgery. Research Manager Tom Øresland**
  - ENT research group (Magnus von Unge)
  - Urological Research Group (Stig Müller)
  - Gastrosurgical research group including maternal/endocrine, anaesthesia, vascular / thorax (Ola Røkke)

- **Orthopedic Clinic/ research group. Research Manager Asbjørn Årøen.**

- **Division of Mental Health/ R&D Research and Development. Research Manager Torleif Ruud**
  - Psychobiology and substance abuse (Lars Tanum)
  - Child and Adolescent Mental Health (Pravin Israel)
  - Quality and implementation (Kristin S. Heiervang)
  - Relatives and users' experiences (Bente Weimand)

- **Division of Paediatric and Adolescent Medicine. Research Manager Britt Nakstad**
  - Research Group for Neonatal Resuscitation and Patient Safety
  - Research Group for Respiratory Infections
  - Research Group for Neonatal Nutrition, Growth and Development

- **Health Services Research Unit (HØKH). Research Manager Hilde Lurås.**

- **Division of Medicine – Department of Research. Research Manager Helge Røsjø.**
  - Oncogenomics (Vessela Kristensen)
  - Cardiac thorax research group (Torbjørn Omland)
  - Clinical Neuroscience Research Group (Tormod Fladby)
  - Gastroenterology Research Group (Jørgen Jahnsen)

- **Division of Gynaecology and Obstetrics. Research Manager Anne Eskild.**
  - Gynaecology and obstetrics

- **Division of Diagnostics and Technology. Research Manager Tor-Arne Hagve**
  - Department of Microbiology and Infection Control in collaboration with the Department of Infectious Diseases from the Medical Clinic (Truls Leegaard)
  - Medical biochemistry. Interdisciplinary laboratory medicine and technology (Tor-Arne Hagve)