

# Psychology and Psychiatry

Panel 6

## Evaluation Division for Science





# **Psychology and Psychiatry – Panel 6**

Clinical psychology, social-, community- and workplace psychology, organizational psychology, personality psychology, developmental psychology, cognitive psychology, biological psychology and forensic psychology. Psychiatry, including geriatric psychiatry, child and adolescent psychiatry, biological psychiatry, and forensic psychiatry. Behaviour research. © The Research Council of Norway 2011

The Research Council of Norway P.O.Box 2700 St. Hanshaugen N–0131 OSLO

Telephone: +47 22 03 70 00 Telefax: +47 22 03 70 01 bibliotek@rcn.no www.rcn.no/english

The report can be ordered at: www.forskningsradet.no/publikasjoner or green number telefax: +47 800 83 001

Design: Agendum as Printing: 07 Gruppen AS Number of copies: 500

Oslo, November 2011

ISBN 978-82-12- 02999-6 (print) ISBN 978-82-12- 03000-8 (pdf)

# Preface from the Research Council of Norway

The Research Council of Norway (RCN) is given the task by the Ministry of Education and Research to perform subject-specific evaluations. According to the plan for these evaluations the RCN carried during 2010 and 2011 out a comprehensive evaluation of Norwegian research within biology, medicine and health in Norwegian universities, hospitals, relevant university colleges and relevant research institutes. Evaluations have previously been performed within these subjects/fields, in biology in 2000 and medicine and health in 2004.

Due to the large span in disciplines and the number of scientific groups involved in the evaluation, seven international panels of experts were established; each of them reviewed one of the following subfields:

- Panel 1 Botany, Zoology and Ecology-related Disciplines
- Panel 2 Physiology-related Disciplines
- Panel 3 Molecular Biology
- Panel 4a Clinical Research Selected Disciplines
- Panel 4b Clinical Research Selected Disciplines
- Panel 5 Public Health and Health-related Research
- Panel 6 Psychology and Psychiatry

The Research Council of Norway would like to thank the panel for the comprehensive work the panel has performed.

Oslo, October 2011

Hilde Jerkø (sign.) Director Division for Science Mari K. Nes (sign.) Director Division for Society and Health

# Statement from the panel

The present report summarizes the findings from the evaluation of the scientific quality of Norwegian research within psychology and psychiatry in Norwegian universities, research institutes, and university colleges, requested by the Research Council of Norway. The report is based on the written self-evaluations and the information provided by the level I units (departments, institutes) and level II units (research groups within departments and institutes) at the hearing in Oslo, March 2011.

The panel appointed by the Research Council of Norway included the following persons:

Professor Agneta Herlitz, panel leader, Aging Research Center, Karolinska Institutet, Stockholm, Sweden Professor Emeritus Lars Jacobsson, Umeå University, Umeå, Sweden Professor Eve C Johnstone, Department of Psychiatry, University of Edinburgh, Edinburgh, Scotland Professor Amina Memon, Royal Holloway University of London, London, England Professor Pekka Niemi, Department of Psychology, University of Turku, Turku, Finland Professor José María Peiró, Organizational Psychology, University of Valencia, Valencia, Spain Professor Robin Room, School of Population Health, University of Melbourne, Australia Professor Anita Thapar, Child and Adolescent Psychiatry, Cardiff University, Wales Dr. Sari Karlsson, panel secretary, Aging Research Center, Karolinska Institutet, Stockholm, Sweden

The following sections describe the evaluation process, followed by the panel's description of the field, and general observations and recommendations that arose from the evaluation. Finally, more detailed evaluations of the level II units are presented, together with grading, and specific recommendations for further action.

The panel would like to thank the Norwegian researchers, both senior and junior, for their open and constructive discussions at the hearing, and also for providing informative self-evaluations.

## To the Research Council of Norway

The members of Panel 6 for the Evaluation of research in biology, medicine and health in Norway 2010-2011 hereby submit the following report. There is consensus among the members of the evaluation panel about the views presented in this report. The panel members are in collective agreement with the assessments, recommendations and conclusions presented. None of the panel members has declared any conflict of interest.

Professor Agneta Herlitz Karolinska Institutet, Sweden Chair

Professor Pekka Niemi Turku University Finland

Auil Nerd

Anita Thapar Cardiff University United Kingdom

Shotre

Eve C Johnstone University of Edinburgh Scotland

cx m\_

Professor Amina Memon Royal Holloway University of London United Kingdom

Robin Room University of Melbourne Australia

Jose Maria Peiro University of Valencia Spain

Lars Jacobsson Umeå University Sweden

Sari Karlsson, Sweden acted as scientific secretary for the evaluation panel.

Evaluation of biology, medicine and health research in Norway (2011)

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Evaluation of biology, medicine and health research in Norway (2011)

# **1. Executive summary**

The main objective of this evaluation was to assess the scientific quality of Norwegian research within psychology and psychiatry in Norwegian universities, research institutes, and university colleges. The evaluation was based on the units' self-evaluations and interviews conducted with representatives of the units. The evaluation was undertaken in March 2011 at the request of the Research Council of Norway.

It is clear that Norwegian research in psychology and psychiatry shows large qualitative differences, with some units being excellent from a national and international perspective. The excellent units were typically relatively large, had one or two strong research leaders, had fruitful and frequent international collaborations, postdoctoral fellows as well as full professors, and often made use of large longitudinal databases or registries. Less successful research units were typically small, had been organised for this evaluation only, lacked cohesion and internal communication, conducted research with little or no collaboration with other groups, had diffuse and wide research interests, and were often burdened by heavy teaching obligations.

At a general level, a number of observations were made, some of which the panel felt could be followed by recommendations. The observations and recommendations are summarized below, in no specific order, and are further presented and explained on pages 13-18.

- The tremendous opportunities provided by the population-based databases and national health registries are not fully utilized. A national committee, improvements in infrastructure, and specific calls aimed at these topics are recommended.
- There is a tendency within the psychology departments to have research efforts subdivided into small research groups, with limited productivity, attempting to cover a wide variety of topics in research and teaching. The assumption that all academic positions should be evenly split between research and teaching may not be optimal. We recommend that the scientifically successful staff are rewarded with a decrease in teaching and administrative responsibilities in a flexible and transparent system. The possibility of pooling resources and sharing expertise for educational programs should be considered.
- The frequent reorganization of departments and groups consume a great deal of resources and it is suggested that, in order to provide a more stable work environment, they should be avoided unless absolutely necessary.
- The staff of the departments and institutes are aging. Strategies for replacement need to be considered, possibly by international recruitments, in which the competitive advantages (e.g., databases and registries) of Norwegian research should be highlighted.

- A large proportion of the research is currently published in Nordic journals with limited global scientific impact. Consequently much of the Norwegian research has limited global scientific impact, in spite of it being of good quality and of general interest. Publication strategies should promote more peer-reviewed publications in international journals with circulation outside the Nordic countries.
- The career path from postdoctoral fellow to full professor is often unjustifiably quick, resulting in a stagnant, top-heavy organization, lacking in dynamics. Midcareer positions are needed. In order to increase competition, the critical mass from which researchers can be recruited needs to become larger and the criteria for promotion to senior research positions should be critically reviewed.
- It is difficult to recruit clinicians in psychology and psychiatry into academia. A system in which rewards for research are increased for those with clinical as well as research competence needs to be implemented.
- A general awareness of the importance of international collaborations is rarely evident in the scientific production. It is recommended that calls supporting postdoctoral periods abroad, with a prolongation of funding when returning from abroad, are implemented. Collaborative research efforts involving EU funding should be supported, with grant offices and departmental administrative staff trained to facilitate these efforts.

# 2. The evaluation process

Lars von Knorring was initially appointed as chairman, but was unable to participate at the hearing and was therefore replaced by Agneta Herlitz. The panel members received the self-evaluations and other relevant documents two months before the hearing took place in Oslo, March 20-25, 2011.

The self-evaluations were read before the hearing at which the level I units (departments, institutes) and level II units (research groups within departments and institutes) presented themselves in a strength-weakness-opportunity-threat (SWOT) analysis. Following the presentation, the panel was given the opportunity to ask representatives from the level I and II units complementary questions. The panel members discussed and summarized their impressions daily, and gave preliminary scientific ratings of the units. The panel also had the opportunity to meet a group of post doctoral fellows to discuss possibilities and problems for junior researchers. At the final sessions of the meeting, the ratings and general impressions were once again discussed. Following the hearing in Oslo, each of the panel members have been actively involved in writing the report, which has been edited by the secretary and the chairman, circulated among panel members, and then integrated to form the final version.

The level II research units were graded according to the five-point scale presented below. In addition to "Excellent", "Very good", "Good", "Fair", and "Weak", the panel found it useful to use intermediate grades between the five main grades (e.g., "Very good to excellent").

Excellent	Research at the international front position: undertaking original research of international interest, publishing in leading international journals. High productivity.
Very good	Research with high degree of originality, but nonetheless falls short of the highest standards of excellence. A publication profile with a high degree of publications in leading international journals. High productivity and very relevant to international research within its sub-field.
Good	Research at a good international level with publications in internationally and nationally recognized journals. Research of relevance both to national and international research development.
Fair	Research that only partly meets good international standard, international publication profile is modest. Mainly national publications. Limited contribution to research
Weak	Research of insufficient quality and the publication profile is meagre: few international publications. No original research and little relevance to the field.

It should be noted that any potential change in scientific quality from the previous evaluation (2004) was not considered, partly due to the fact that the level II units were often organizationally different in 2011, but also because the previous panel was composed of different members. Hence, a change in grading may reflect differences in the organization of the units or the panel rather than that a true change in scientific quality has taken place.



**Figure 1** shows the frequency of level II units receiving the different grades. As can be seen, the distribution of grades was fairly even, with the majority of units being graded as good or better.

#### **Recommendations for future evaluations**

The panel suggests that the bibliometric reports are carried out at the lowest level of evaluation (in the present case, at unit II level) in order for them to provide valuable information. Preferably, the reports should show the development of both national and international publishing during the evaluation period, as well as the annual citation rate and how it contributes to the overall production of the unit.

Several (successful) researchers have double, or even triple, affiliations, resulting in their scientific work sometimes being unjustly credited to several units. In future evaluations, researchers with multiple affiliations should be required to specify a single unit to be affiliated to – true collaborative efforts, resulting in co-publications, would nonetheless be justly credited to all units in question.

# 3. General description of the field

The excellent research area in Norwegian research in psychology and psychiatry lies within neuroscience, with a special focus on cognition or psychiatric disease presentation, studied with brain imaging methods in normal and psychiatric populations. The interdisciplinary field of neuroscience has received considerable interest world-wide during the last decade, partly as a result of new techniques and equipment being developed and becoming increasingly available for researchers, thereby allowing research questions previously not investigated to be studied. These factors have in Norway contributed to attracting young researchers, increased competition, and, in turn, to excellent scientific quality. The challenge now is to maintain the high scientific quality, which is not only important from a scientific viewpoint, but also from a clinical and practical perspective as the research generates important knowledge regarding, for example, brain function, plasticity, and rehabilitation.

The panel is also very optimistic about the future for research conducted utilizing the impressive longitudinal population-based databases and biobanks, which together with national health population registries and the system of personal identification numbers provide unique possibilities to do research – including studies which it would not be possible to do elsewhere. It is important that these assets are fully utilized, maintained, and protected, also in the post-genome era where numerous other types of molecular-level data characterizing the individual will become available. Long-term financial support to the infrastructure around these databases would facilitate the utilization of the data and secure maintenance and the development of new databases.

Weaker areas of research within psychology and psychiatry are less readily identified. Several sub-disciplines of psychology and psychiatry are represented among the groups that received the grade "weak", or "weak to fair". What is evident, however, is that the common features of these level II units are that they are small, lack strong scientific leadership, conduct research with little or no collaboration with other groups, have diffuse and wide research interests, and often are burdened by heavy teaching obligations. Clearly, the fragmentation of research into small research constellations conducting research with unclear focus and objectives is not a successful strategy. The panel recommends that larger research units are established, preferably unified in a common research interest, and with a clear scientific leadership.

Excellent	•		••		
Very Good to Excellent					•
Very good	•••		••		•
Good to Very Good	••		•	•	••
Good	••	••	••••	•••	•
Fair to Good	••	•••	••	•	•
Fair	•••	•	•••	•	•
Weak to Fair	•				
Weak	••	••			
	UiB	NTNU	UiO	UiT	Other

**Figure 2** shows the distribution of grades across the University of Bergen (UiB), Norwegian Institute of Science and Technology (NTNU), University of Oslo (UiO), University of Tromsö (UiT), and the other institutions (Other).

# 4. Observations and recommendations

During the course of the evaluation of the 15 level I units (departments, institutes) and 52 level II research units (research groups), the panel made a number of observations about the state of research in psychology and psychiatry in Norway. Below are the identified observations and problems outlined, together with the panel's suggestions and recommendations for improvement.

### Tremendous opportunities not fully utilized

Norway has succeeded in creating large, important and very impressive longitudinal population-based databases, which together with national health population registries and the national personal identification number constitute unique possibilities to do excellent research. Although the Norwegian Institute of Public Health and other units conduct research based on these databases, it is the view of the panel that this great asset is underutilized.

Notably, the national datasets are highly relevant to psychiatric research. For example, the recognition that there is a neurodevelopmental element to many psychiatric disorders, including some which do not arise in youth, means that longitudinal data collected over decades in populations can be linked to registers and provide answers to issues of susceptibility and resilience which cannot otherwise be addressed. Linking these datasets to genetic information will provide a picture of the wider phenotype of disorders and also provide understanding of the clinical picture of carrier states in conditions where past understanding has been shown to be an over-simplification. Further, the databases and registries may provide important information regarding the split between the more extreme end of the spectrum of mental disorder, as manifested in clinical case loads, and the wider and more diffuse range of problems to be found in general populations. Differences in terms of degree of disability, in terms of responses to specific therapeutic interventions, or in terms of appropriate organisation of societal responses can thereby be elucidated.

Thus, these registries are unique resources from an international perspective, and capable of contributing knowledge of great scientific interest. They are a substantial national asset which also could contribute to internationalization of Norwegian research. It is important that they are exploited to the fullest.

**Recommendation**: The databases are of such importance that the value of a national committee or a steering committee, which would assess and oversee proposed studies using the datasets should be considered. The possibility of inviting international experts to be involved in such a committee deserves consideration. This would also strengthen opportunities for international collaborations. Supporting the infrastructure with statisticians and data handling technicians around the databases may make the data more easily accessible to the research groups. In order to further promote utilization of these data, specific RCN calls aimed at these topics may be warranted.

### Increase research focus and resources

Norway has a regionalization policy by which resources related to research and education are geographically distributed. As a result, there are three departments and one faculty of psychology in Norway, each with the responsibility for the 5-year master program and 6-year clinical program in psychology. Thus, teaching demands are high, and the staff is typically recruited to fill these demands, although most positions have an equal distribution of research (45%) and teaching (45%).

Research conducted within these four departments was evaluated in a large number of research groups. As many of these groups were formed for the purpose of this evaluation, with smaller groups combined into larger units, the actual groups are even smaller. Thus, psychological research in Norway is often conducted in research groups consisting of 1-2 researchers. This is a result of the diversity of interests in departments, given that coverage of most aspects of psychology is required in order to fulfil teaching obligations. However, it is clear from the evaluation that many of these groups were functioning in a relatively isolated manner, with little interaction with other groups within Norway or even within their departments. Often they lacked leadership to synthesize diffuse research focuses and research strategies. Many of these groups were graded as less than good.

**Recommendation**: Important questions are therefore whether all academic staff should be expected to conduct research? Is it necessary for all departments to have most aspects of research in psychology covered in order to conduct high quality education? And, is it possible to focus resources and share expertise for educational programs in a relatively small country? Besides recommending that scientifically productive and successful staff is rewarded by a decrease in teaching and administrative responsibilities in a flexible and transparent system, the panel finds it difficult to give any firm recommendations on the more structural aspects of these questions, but strongly recommends a discussion of these issues.

### The frequent reorganizations

At the evaluation hearings, a number of units mentioned having undergone reorganizations or restructuring during recent years. Although some of them appear to have been successful (for example, the new Tromsö Faculty of Health Sciences and the reorganization in Trondheim leading to administrative changes which clearly supported and fostered research), the effects of others were less clear.

**Recommendation**: In order to provide a more stable work environment, avoid reorganization unless it is absolutely necessary.

### An aging staff

As was noted in the 2004 evaluation, a large part of the Norwegian research staff in psychology and psychiatry is close to retirement. In 2011, this is still a problem. Moreover, there is little evidence of strategic thinking on if and how the successful older group leaders should be replaced and how junior staff should be mentored/rewarded so that they have the motivation to continue in academia. Naturally, truly excellent researchers are few and therefore difficult to replace.

**Recommendation**: It is recommended that the departments and institutions, together with the research units, identify the problem and consider strategies for replacement. These strategies can involve international recruitments, in which the competitive advantages (i.e., databases and registries) in Norwegian research need to be highlighted.

### **Publication strategy**

A relatively large proportion of the research is published in Norwegian, Scandinavian, or Nordic psychology and psychiatry journals. Most of these journals are circulated among and read only by Nordic researchers, and, therefore, have a low global scientific impact. As a result, much of the Norwegian research will have limited scientific impact. Naturally, the reasons for publishing in these journals could be that earlier versions of a manuscript have been rejected by higher impact journals, but is more likely done as a first-hand choice, based on traditions, and a belief that the research will be of specific interest to other Nordic researchers. However, it is the panel's opinion that much of the Norwegian research are of such high quality and of general interest, that it should be communicated to a larger scientific audience, and, thus, should be published in journals that are distributed and read worldwide.

**Recommendation**: Acknowledging that there may be specific problems associated with publishing articles on topics that are geographically or culturally specific, the panel suggests that departments and institutes should have a clear publication strategy, specifically promoting peer-reviewed publications in international journals with circulation outside the Nordic countries. However, the quest to communicate with and inform clinicians and practitioners is commendable and should be continued.

### From postdoctoral fellow to full professor

The organization is typically top heavy, with few junior and midcareer research positions (postdoctoral fellows, assistant professors) and many senior positions (associate professor or full professor). In an international comparison, it is also clear that relatively junior researchers in early phases of their careers have often reached positions that should indicate that they have more research experience and success than is actually the case. The latter indicates that the competition in Norwegian research is unsatisfactory. One of the many consequences of a career system in which top positions are reached rapidly, is that the incentive to be scientifically productive is removed. It also reduces the willingness for national mobility.

**Recommendation**: The problem of inadequate competition is difficult to solve in a small country. However, the great assets in the form of valuable databases and a good economy should be promoted when internationally recruiting researchers. The panel also suggests that more midcareer positions, between postdoc and full professor, are established, with no automatic assumption of continuation or promotion to full professor. In addition, the criteria for promotion to senior research positions (associate professor, professor I) should be critically reviewed.

### **Clinical research and researchers**

There seem to be difficulties in recruiting both clinical psychologists and medical doctors to do research and to fill academic positions. A recurring comment was that the salaries of clinicians are much higher than the salaries of academic staff at the same level in terms of training. It was also apparent that clinical positions do not necessarily require academic training, which contributes to the low interest in remaining in academia after having received a PhD. A financial disincentive will always be problematic, and, in other systems, medically qualified academic clinicians are usually on the same payscale as those who do not conduct academic work, provided that they have sufficient clinical responsibilities. Although promotion is slower for academics, on a career-average basis they can do better financially in some countries, for example, being more readily eligible for special awards.

**Recommendation**: Recruitment into academic psychiatry may be best enhanced by educational focus during undergraduate and early postgraduate medical training. Therefore, the double specialization program, offering clinical specialization in conjunction to PhD, is a step in the right direction. The possibility of setting up PhD programs with intake early in the medical/psychology education, in order to decrease the overall length of studies and make the career of a physician/psychologist-scientist more attractive, may also be considered. In addition, research for clinicians needs to be better financially rewarded in order to obtain equality for clinicians doing research and clinicians doing clinical work.

### Internationalisation

Judging from statements in the self-evaluation, there is a general awareness of the importance of international collaborations and exchange, and most units report that they are collaborating with one or several international groups (with perceptible variation in success). This is a positive development. Nonetheless, the collaborative efforts rarely seem to result in co-publications (with some notable exceptions). In addition, very few young researchers (postdoctoral fellows) spend any extended time abroad, or even change workplace within Norway after having finished their degree. It was also clear that there was relatively little interest in collaborative research efforts involving EU funding and that the specificity of Norwegian psychiatric treatment system arrangements, for instance, tended to become an argument for country-specific research, rather than for comparative studies of what difference the different arrangements made.

**Recommendation**: Researchers should be encouraged to apply for external funding from internationally recognised outlets such as the EU, and the already existing grant offices should further promote their services to facilitate the application process. The number of postdoctoral fellowships where longer stays at foreign universities and institutes are encouraged and supported should be increased. In conjunction with this, a funding scheme for young, talented postdocs returning from abroad should to be set up to provide job security for a time-limited period. This would not only increase international collaborations, but also increase the base from which future research leaders can be recruited. In addition, co-publications with international partners should be encouraged and promoted when, for example, evaluating grant proposals.

# 5. Evaluation of all Research Units

Evaluation of biology, medicine and health research in Norway (2011)

# 5.1 University of Bergen (UiB), Faculty of Psychology

The Faculty of Psychology at the University of Bergen has gone through a rocky period of organizational changes. In 2010, the Faculty introduced the present departmental structure including five departments, of which three, Department of Biological and Medical Psychology, Department of Clinical Psychology, and Department of Psychosocial Science, are included in the evaluation by this panel. The documents are sketchy concerning the guiding principles behind the reorganization, and it seems as if a great deal of time has been spent on reorganisation without due consideration of the time involved and the impact it might have on research output. While the Faculty's administrative support for research is much appreciated, it would be advisable in the interests of productivity and the working atmosphere to halt or slow down further restructurings.

### 5.1.1 Department of Biological and Medical Psychology

#### Description of the department

The Department of biological and medical psychology was formed in 1990 in a fusion of three smaller departments (Somatic psychology, Physiological psychology, and Clinical neuropsychology). Presently, it consists of three research groups each led by a tenured faculty member, a graduate school in neuroscience, and a neuropsychological outpatient clinic. The academic faculty has research, teaching, and administrative obligations. The department employs a total of 41 persons, including eight professors, four associate professors, two professor IIs, two senior research scientist, three researchers, 10 postdoctoral fellows, and 19 PhD candidates. Fourteen PhD candidates graduated within the department between 2007 and 2009.

#### General comments and recommendations

The department has followed the recommendations from the last evaluation and has started collaborations across departments and faculties, nationally with the four largest universities in Norway, and also internationally. They have become more outward oriented, and have focused their research more strongly. They are functioning at a level where they could achieve more international collaboration and recognition and hence succeed with international funding.

#### 5.1.1.1 Bergen Cognition and Learning Group

#### Description of the Unit

The Bergen cognition and learning (BGLG) group was formed in 2006. BGLG is a crossdisciplinary research group with a special focus on learning and cognitive functions in groups at risk for academic failure. These include children at risk for developmental and behaviour problems, people exposed to violent acts, and incarcerated adults. The group does research on education in populations of prison inmates, and is part of the "Bergen Speak Up Project", which is a longitudinal study of children at risk of developmental dyslexia. BGLG consists of four full-time professors, one associate professor, one postdoctoral fellow, and eight PhD candidates. Five of the PhD candidates are externally funded.

#### General comments

The unit has projects involving analyses of education in populations of prison inmates, and have managed to do fMRI scans of pre-school children (part of the Bergen Speak up project). Longitudinal studies of children at risk of developmental dyslexia, in which fMRI assessments are included, are relatively rare. The unit fears that funding will be difficult in the future, as they may fall between two funding systems. They have small numbers of aging staff. The gender distribution among the full time faculty members is even, but there has been a slight problem in recruiting male candidates to PhD positions within the area.

This is a strong group working on important fields. They have been able to bridge between educational and health care approaches in their studies of risk factors for the development of reading problems and language impairments. While they say that this has not fitted as well as it might have done with current funding strategies, it has provided new insights into an important area of impaired function. Their achievement in successfully deriving serial scans in young children is highly unusual and is to be commended.

#### Scientific quality

Their publication record is variable but some publications are of very high quality. In the last five years the group has published 52 articles in international peer-reviewed journals, 17 articles in Norwegian journals, and 48 book chapters and reports.

#### Grading: Good to Very Good

#### Societal impact

The group is studying topics associated with major societal problems and where relatively little hard evidence exists. This is particularly true of serial developmental studies including fMRI of young dyslexic children, but it is also true of the work on prison inmates; in some societies access to such groups is very difficult but problems are grave. Hence this work provides a valuable contribution.

#### Recommendation

The unit should continue their present course but the work would be enhanced if they could increase the numbers of participants in some studies, and also increase the number of publications in peer-reviewed journals. As it is now, a large part of the production is published as book chapters or in Norwegian peer-reviewed journals. Hiring postdoctoral fellows may be one way to increase publication rate and quality.

#### 5.1.1.2 Bergen fMRI-group

#### Description of the Unit

The research in the Bergen fMRI group is organized as a core group with a head group leader, and three sub-groups, or nodes, the Neuropsychological phenotyping node, the Bergen mood and cognitive function node, and the Bergen research group on auditory perception node. The unit has one head for each node. The research has both breadth and

focus and includes topics such as auditory hallucinations in schizophrenia, neuropsychology of aging and the aging brain, brain markers of routine errors, and mapping of the cortical networks in speech processing.

The group includes four professors, five associate professors (three associate professor IIs), two researchers, eight postdoctoral fellows, and 20 PhD candidates. A few of the senior faculty have heavy teaching and administrative duties, whereas the others are more involved in research and PhD supervision.

#### General comments

This is a very strong group whose work is internationally well known and highly respected. The group has received continuous external funding and is well resourced with good access to up to date equipment and resources. Although the staff is not young - the professors are aged between 50 and 65 - they remain vigorous and innovative. The group is clearly international, with previous and current members having a background from several European countries and the USA, in addition to Norway.

They are involved in strong translational work of clinical importance to areas of great interest. They are highly competent and publish extensively in very high quality journals. To some extent, they see the pressure to broaden their interests as a threat, but they expect to be able to cope with this and it is anticipated that they will succeed.

#### Scientific quality

The group has a sustained track record of internationally highly regarded research. The work addresses an important field, is highly innovative and conducted according to very high standards using cutting edge techniques. In the past five years the groups has published over 206 international peer-reviewed articles, five Norwegian/national articles and 20 book chapters. They have published multiple papers in Hum Brain Mapp, Neuroimage, Neuropsychologia, PNAS, Neurosci Lett, and Am J Med Genet. They have also published in Arch Gen Psychiat, Am J Psychiat, and Biol Psychiat. In the field, these are journals of excellent quality; this is an exemplary and praiseworthy publication record.

#### Grading: Excellent

#### Societal impact

Much of the scientific work done in this group concerns basic science, and has therefore not yet had much societal impact, although the societal impact could be high in the future. Nonetheless, their work has had a large impact in the scientific community.

#### Recommendation

The panel hopes that this group will be able to continue the present course. However, the fact that the excellent staff is aging is a threat that needs to be considered in the future.

#### 5.1.1.3 Research Group on Experimental and Clinical Stress

#### Description of the unit

The research group on experimental and clinical stress (RECS) seeks to combine expertise from a variety of disciplines including psychology, physiology and biomedical sciences. The group focuses on translational research related to stress exposure and its consequences for general health and disease at various levels, including mental, behavioural and physical factors. Resilience factors are also studied. Specific research themes include gastrointestinal disorders, sleep disorders, animal models of depression and anxiety, and drug and alcohol abuse.

The group consists of 10 members: one full professor, two associate professors, one postdoctoral fellow, four PhD candidates, and one professor II. Three of these persons hold full-time permanent positions and also have teaching obligations.

#### General comments

The group is dependent on laboratory facilities, which have been under construction during several years. The members have considerable experience with animal models, mostly rats. The laboratory facilities feature a large range of behavioural testing equipment, such as equipment for biochemical and histological analyses, microdialysis, EEG/EMG, and extracellular stimulation and registration of field potentials and long-term potentiation.

#### Scientific quality

The advanced laboratory infrastructure, when in place, would probably make the Research group on experimental and clinical stress an attractive research partner. So far, the scientific output rather hints at these possibilities instead of being convincing. The group has published 24 international articles, three national peer-reviewed, and three books/book chapters during the years 2005–2010. The list is quantitatively unimpressive but shows a healthy ambition in terms of the quality of the targeted journals.

#### Grading: Fair

#### Recommendation

The next five years are decisive for the Research group on experimental and clinical stress. Energetic leadership is needed to make the investments bear fruit. Scientific visibility requires a clearly stronger publication record. However, the panel thinks that the group deserves a chance to prove itself.

### 5.1.2 Department of Clinical Psychology

#### Description of the department

The Department of clinical psychology has undergone thorough organizational changes, of which the most recent one took place in 2010. The research is currently organised in five research groups all evaluated by this panel; Performance anxiety and qualitative clinical studies; Qualitative research on mental health; Relational therapy and psychotherapy; Trauma psychology; and Treatment.

The department consists of six tenured professors and seven associate professors. One of the professors is in practice located at the Regional Competence Centre for Child and

Adolescent Psychiatry. Two scholars in professor II positions contribute to the research and educational responsibilities. In addition, there is one full-time lecturer, 24 part-time (20%) lecturers and clinical supervisors, one postdoctoral fellow and five PhD candidates. Four PhD candidates have graduated between 2007 and 2009.

#### General comments and recommendations

Each research group has at least one to two tenured staff. The groups function independently from one another. A recent reform worth following up has been the hiring of clinical psychologists from national health services to work as part-time lecturers supervising students in their first clinical practice. The arrangement aims at more research time for the tenured staff. A heavy retirement wave is going on presently and continuity in research is jeopardised. Of 15 staff with CVs submitted, only five were born in 1958 or later, 10 in 1953 or earlier.

The annual budget of the Department is about NOK 150 Million of which only a small amount, about NOK 2–3 Mill, comes from external grants. The number of graduated PhDs has been small in 2007–2009. An additional perceptible feature is the small size of all, except one, research groups. Currently the leadership encourages the group leaders to think in terms of larger research units. It is obvious that it is only the Bergen group for treatment research fulfils the criterion of being more than one or two individual scholars with some associates around them. As the panel sees it, the department can optimally host no more than two research groups with its current human resources.

#### 5.1.2.1 Performance Anxiety Research and Qualitative Clinical Studies

Note: There was no representative of the group at the hearing and relatively limited information was provided in the self-evaluation.

#### Description of the unit

The Performance anxiety research and qualitative clinical studies research group is involved in research related to test anxiety and mindfulness. The unit consists of two associate professors and one researcher. At the time of the evaluation, there was no PhD candidate.

#### General comments

Unfortunately the group was not represented in the evaluation session and very little information about the unit is provided in the written self-evaluation. There is little external funding available, although some international collaboration seems to exist.

#### Scientific quality

The publication record for the group is rather poor. They have published three international peer-reviewed articles, three Norwegian/national publications and two book chapters during 2005-2010.

#### Grading: Weak

#### Recommendation

In the view of the panel, a positive development for this group can be achieved by merging it with the Group for qualitative research on mental health. Such an

organizational change is reasonable given the fact that there is already collaboration between the two groups.

#### 5.1.2.2 Group for Qualitative Research on Mental Health

Note: There was no representative of the group at the hearing.

#### Description of the unit

This is a new group that was established in June 2009. It is led by two professors, and includes an additional six PhD candidates and four associate members. As reflected in the name of the group, research themes have in common a qualitative hermeneutic-phenomenological approach. Change and recovery process is a theme which is particularly highlighted in the self-assessment.

#### General comments

The leadership finds the funding of PhD projects relatively easy and alludes to the societal relevance of the research. The age distribution of group members is favourable and the research is thematically and methodologically focused.

#### Scientific quality

The group has 14 international publications, nine Norwegian/national publications, and two books/chapters from the years 2005-2010. The coming years may witness an increasing number of peer-reviewed contributions. This group has a potential to become a competent contributor to research in therapy process and outcome.

#### Grading: Fair to Good

#### Societal impact

The panel thinks that the pragmatic and experiential approach together with the involvement of service users holds a potential for a societal impact. It is not difficult to see that many stakeholders in working life and health services may presently experience a lack of such information.

#### Recommendation

Strengthening this group seems a useful investment. As the first step it is recommended that the PARQCS group is merged with it. The fact that the group has as many as six PhD candidates is an advantage that they should benefit from, both with regard to scientific publications, and with regard to expansion.

#### 5.1.2.3 The Bergen Relational Theory and Psychotherapy Research Group

#### Description of the unit

The Bergen relational theory and psychotherapy research group was formally established in 2006. The over-arching theme is psychotherapy processes and outcome, with a focus on advancing knowledge about the processes, mechanisms of change and treatment outcomes. This is a small group consisting of two professors (one full-time, one in a 40% position), two PhD candidates, and one affiliated member.

#### General comments

Both quantitative and qualitative methods are used. The research is heavily influenced by the work of the two senior members who will be retiring within the next few years. Three PhD candidates have recently defended or are about to defend their theses. This suggests that there are possibilities for continued work in the tradition established by the two senior members.

#### Scientific quality

The members of the group have published 26 international peer reviewed articles, 17 Norwegian/national papers, and four books/book chapters during the years 2005–2010, although only the 11 international peer reviewed articles published after 2007 were presented in the publication list to the panel at the evaluation. The choice of publication outlets is typically not ambitious.

#### Grading: Fair

#### Societal impact

Neither the documents nor the interview session provided information bearing on this aspect, but furthering knowledge about the processes and mechanisms surrounding psychotherapy could eventually contribute to the improvement of the therapy.

#### Recommendation

The panel agrees with the suggestion included in the self-assessment: "the modest size of the group might make it wise to initiate a discussion of possible fusion with other groups within the Department of clinical psychology - for instance, the Treatment research group". The panel sees certain value in the idea that younger faculty develop further the line of thinking established by the two senior members.

#### 5.1.2.4 Trauma Psychology Research Group

#### Description of the Unit

The Trauma psychology research group (TPRG) is engaged in the advancement and exchange of knowledge about methods for assessment and treatment of post trauma psychological distress after civilian trauma. The unit has two full-time associate professors, one PhD candidate, and five associate members.

#### General comments

The TPRG is a small group with only two full-time members. A main objective is to provide instruments to assess traumatic events and trauma reactions in the clinic. Members of the TPRG are engaged in teaching activities and seem to be less focused on research activities. There is no clear strategy on how to increase the research productivity and quality in the future, more than to continue ongoing data collections and to collaborate with clinical institutions.

#### Scientific quality

The group has a rather low publication record, with three published articles in peerreviewed journals, two articles published in a Norwegian journal, and one book chapter in the past 5 years. No external grants are reported, and the data collections seem to be done with no clear focus or specific hypothesis in mind.

#### Grading: Weak

#### Societal impact

The research topic, assessment and treatment of post trauma distress after civilian trauma, has the potential to contribute with valuable knowledge, improving our understanding and assessment of trauma distress. However, at present the research activity in this group is low, preventing such an impact.

#### Recommendation

It is unclear to what extent the main focus in this group is research. At present, clinical work and teaching appear to have priority. If research should develop and increase, research must be prioritized and more time and effort towards that aim is needed, possibly by seeking international collaboration with productive researchers. It is also suggested that rather than recruiting an additional PhD candidate, a post doc researcher may be preferred.

#### 5.1.2.5 The Bergen Group for Treatment Research

#### Description of the Unit

The research in the Bergen group for treatment research is organized around three themes: sleep disorders, treatment of anxiety, and health psychology. The group consists of four full time professors, one professor II (20%), one associate professor, one associate professor II, one assistant professor, and one temporary assistant professor. Presently, 12 PhD candidates are affiliated with the group. In the period 2005-2010, six PhD candidates completed their thesis with a group member as the main supervisor, and one with a group member as a co-supervisor. Group members were the main supervisor and co-supervisor, respectively on two PhD theses submitted at the Faculty of Medicine and Dentistry.

#### General comments

Much of the group's research concerns randomized clinical trials using cognitive behavioural models, but large databases such as HUNT are also utilized. The node focusing on sleep research collaborates with the Norwegian Competence Centre for Sleep Disorders. International collaboration exists, and a Swedish professor II is actively involved in the research. Some of the senior professors have an impressive total career publication record, and have also been involved as primary supervisors of a large number of graduate students, and it is stated that the group members have been main supervisors for 14 PhD candidates since 2005.

#### Scientific quality

The professors in this group have a good publication record, which is also evident in the 128 international peer-reviewed published articles during the evaluation period. Some of these publications are in very high impact journals (e.g., JAMA), but the pattern is uneven. One reason for the uneven pattern may be that the main research area (psychotherapy) is small, with relatively low journal impact factors. An additional 28 articles are published in Norwegian professional journals, and two book chapters are reported. Research is financed through several sources, including NFR, the University of Bergen Research Fund, and The Meltzer Fund (UoB).

#### Grading: Very Good

#### Societal impact

The research conducted by the Bergen group for treatment research should have a direct societal impact, as their findings have practical implications on the treatment of anxiety, but also sleep disorders. The high quality of the research increases the impact of it.

#### Recommendation

The group is clearly successful and has a good scientific output, In addition, the research group has a reasonable age distribution, with only two members being close to retirement, ensuring that there is a continuation of the work conducted. Challenges include a perhaps too broad focus of research, however, judging from the output, it does not seem to be a major problem. As pointed out in the self-evaluation, recruiting postdoctoral fellows may increase productivity further and ensure continuation of the work.

### 5.1.3 Department of Psychosocial Science

#### Description of the department

The Department of Psychosocial sciences is the largest in the faculty, including six research groups; Judgement, decision making, and social cognition; Decision, intuition, consciousness, and emotion; Bullying research; Society and workplace diversity; Social norms and interaction; and Operational psychology.

The department as a whole employs 51 persons, including 28 professors/associate professors, three professor IIs, one assistant professor, two postdoctoral fellows and 17 PhD candidates. Seven PhD candidates have graduated in 2007-2009. The department is responsible for BA in general psychology, and BA and MA of work and organization.

#### General comments and recommendations

An overall impression is that, given the size of the department, the doctoral program has produced few (7) PhDs during 2007–2009. The department needs to consider the organization of groups and leadership as well as publication and external funding strategy. The panel thinks that the leadership needs to be strengthened and become more strategic. In addition, the department should work towards increasing the external grants for funding PhD candidates and postdoctoral fellows and ensure that a good mentoring support and monitoring programme is in place.

#### 5.1.3.1 Bergen Judgment and Decision Making and Social Cognition

#### Description of the unit

This is a small research unit, which was part of the Bergen decision lab until 2006/2007. The main area of research involves cognitive, affective, and social factors involved in judgment and decision making. The group consists of two tenured professors, one assistant professor, and one PhD candidate with no position, one exchange student, one affiliated member (20%) and one administrative member.

#### General comments

The group has very little external funding. The publishing record suggests a decreasing trend during the years 2005-2010, with 17 international peer-reviewed articles, two Norwegian/national publications, and seven book chapters/books during the evaluation

period. This group exists for historical reasons and it will probably be dissolved by the year 2013. In the event that the group continues, its active members should merge with the group below. Given these circumstances, the panel felt no need to further evaluate the research output of the group.

#### Grading: Fair

#### Recommendation

Merge with the Bergen laboratory for the study of decision, intuition, consciousness and emotion

# 5.1.3.2 Bergen Laboratory for the Study of Decision, Intuition, Consciousness and Emotion

#### Description of the unit

The members of the group have expertise in basic cognitive science, implicit processes, emotions, attitudes, and behavioural control. A recognized goal is to develop expertise in laboratory-based experimental research, including eye-tracking technology, and methodological issues. At the time of the self-evaluation, this group consisted of two full professors, two associate professors, and three PhD candidates.

#### General comments

Somewhat surprisingly, the self-assessment of the group includes no less than 15 research topics. This figure is high for a group of seven members and it is somewhat difficult to see how a good communication about themes can be achieved in the group. Most of the research projects are pursued by one or two researchers, but there is also a project which involves the entire group. The group sees international exchange as a means to attract young researchers. Against the above background it is somewhat puzzling that the group has had setbacks in grant seeking and therefore lost a number of active members. No obvious explanation for this state of affairs emerged in the interview. It is hard to avoid the impression that the leadership is less than optimal. A group leader is democratically elected every year from the group members with permanent positions, and administrative decisions are taken by group consensus.

Given the large number of research topics, it is predictable that not all group members are familiar with all of them. During the interview it seemed that some of the group's most prestigious publications were unknown to the members present in the session. However, the panel thinks that the group has recognised these problems and started taking appropriate measures. For example, in an effort to improve internal communication, the entire group gathers regularly around one common theme. It has intensified and focused the cooperation in the group and strengthened the international collaboration.

#### Scientific quality

Intuitive elements involved in decision are the conceptual backbone of the research. The panel sees that this approach holds considerable promise and should be pursued further. The unit has published 42 articles in international peer-reviewed journals, three Norwegian/national publications and 16 review articles and book chapters in the past five years. The number of peer-reviewed international articles published during the period is steadily increasing from a fairly low start. The group has the capacity to publish in high

impact journals, and the panel thinks that this group holds a potential which has not yet been realized.

#### Grading: Fair to Good

#### Societal impact

The research questions of the group are very relevant for the future society. Intuitive elements are present in the decision making of experts irrespective of their own convictions. Energetic attempts to cultivate this theme would most likely be well received.

#### Recommendation

The next five years are decisive for the group. Of vital importance is to turn the trend of diminishing external funding. Bold decisions are needed to the effect that instead of 15 or so research themes, an essentially smaller number is focused at. The group needs a devoted scientific leader on a more permanent basis.

#### 5.1.3.3 FALK/ Bergen Bullying Research Group

Note: There was no representative of the group at the hearing. The representative of the department responded to questions about the work and characteristics of the group.

#### Description of the Unit

The Bergen bullying research group conducts research within the field of work and organizational psychology, especially focusing on issues related to stress at work, leadership, psychosocial factors at work and interpersonal conflicts. One of its main focus areas since 2005 has been on bullying and harassment at work.

FALK/Bergen bullying research group consist of three professors, two associate professors, and one professor II. Between 2005 and 2010, the group has had eight PhD candidate positions, and an additional two external PhD candidates. Six PhD candidates graduated between 2005 and 2010.

#### General comments

This is a strong group, with a research focus that is of both national and international interest. The group has received continuous funding, including extra funding from the Faculty of Psychology ("Såkornsmidler"), as well as external funding from NFR, companies, Norwegian employers' associations, and from the Norwegian government.

The cooperation with large companies and with research institutions in both Norway and abroad regarding data collection has resulted in valuable databases. The work on publications is organized in groups of 2-5 members with complementary competencies. Judging from the PhD output, the recruitment and management of PhD candidates is well organized.

The group has a wide range of collaborations both nationally and internationally. The group strives to disseminate its findings also to Norwegian audiences, which is laudable in the presence of a convincing international track record.

#### Scientific quality

The group has been very active in publishing, with a wide range of publications in high quality international peer-reviewed journals. In total, the group has published 119 articles (90 in international journals in English and 29 in other languages, mainly Norwegian) and 35 books or book chapters, published mainly in Norwegian. Quite a large number of the international articles have been published in journals with high or good impact factors. All the senior researchers have contributed significantly to the publication record.

#### Grading Very good

#### Societal impact

The panel agrees with the self-evaluation formulated by the group that the societal impact, especially on issues such as bullying and harassment at work, is acknowledged at the national and international level. Research in other countries has been inspired by the contributions of the group, as have policies for organizational intervention for prevention and treatment.

#### Recommendations

The group has shown a positive trajectory, building strengths that should result in further development in the future. The existence of the Work and organizational psychology masters program is an excellent opportunity to recruit competent PhD candidates. The process of internationalization of the enrolment of PhD candidates should continue and be reinforced, as should the collaboration with international institutions and research groups. The new developments in research design and methods should be pursued, as their implementation may contribute to theory development. The policy to incorporate staff at the professorial level has proved to be very positive and should be continued. Moreover, the group could aim to lead European research projects, submitted for funding to the European Union calls. The policy of publications should be maintained with an emphasis on increasing the number of level 2 publications, but also keeping the aim of providing significant inputs to Nordic practitioners and companies.

#### 5.1.3.4 Society and Workplace Diversity Research Group

*Note*: There was no representative of the group at the hearing. The department representative responded to questions about the work and characteristics of the group formulated by the panel.

#### Description of the Unit

The group was established in 2006. The research profile of Society and workplace diversity research group consists of four focus areas: (a) Cultural diversity in organizations and implications for human resource practices; (b) Multicultural teams operating in extreme environments, (c) Acculturation and adaptation, and d) Theory building in culture and psychology.

The group consists of two full professors, one person in a research position, and four PhD candidates. Two researchers with external positions (a postdoctoral fellow at the National Institute of Health and a full professor at the University of Tilburg, the Netherlands) are also members of the group.

#### General comments

The group has been very active and successful in obtaining funding not only at the national level but also at the European level. The group has a well-established cooperation with other research groups, especially with internationally based groups. Members of the group are also affiliated with the Norwegian Institute of Public Health and involved in collaborative projects with other research groups at the Faculty of Psychology (UIB), several governmental bodies, and some communal institutions. One of the strengths of the group is its well-developed international network, which is coherent with the focus of most of the research projects on cultural diversity. Several cross-cultural studies are carried out together with established collaborative networks. Moreover, the collaboration with the ESA and the NASA provides the group with cooperation with other international groups.

#### Scientific quality

In the past five years, the group has published 22 articles in international peer-reviewed journals, 11 Norwegian/national publications and 20 books or book chapters (more than half published by first-rank international publishers). The productivity is acceptable given the limited size of the group. The research projects that have been carried on, or are in progress, have resulted in rich datasets with clear potential for further publications. The group is very active in conducting and participating in international research projects and the topics of these projects seem coherent. Nevertheless, the synergies and complementary effects among the projects carried out are not always apparent.

#### Grading: Good

#### Societal impact

The results of the studies on selection (especially group interviews) may contribute to improve the selection process in companies and organizations through the validation of an interesting tool and strategy. The results of the studies on multicultural teams operating in extreme conditions may produce relevant inputs for the design of technology, work arrangements and living conditions in the Space missions and in other teams working under extreme conditions. Finally, the cross-cultural studies and the analysis of acculturation and the adaptation to migratory processes, especially when children and adolescents are the focus of the study, have clear implications in improving the socialization process of immigrant youngsters.

#### Recommendation

The research group has an interesting and rather coherent research program. In order to achieve even better results, the unit should aim to increase its size by incorporating new members (especially postdoctoral fellows and PhD candidates). Moreover, in our view, the group could show greater synergies among the different projects and studies carried out within the group. Research collaboration in national and international networks appears to be working well, and based on that, the group could better disseminate and communicate to the society the impact of its research.

#### 5.1.3.5 Social Norms and Interaction

#### Description of the Unit

The Social norms and interaction group was formed in April 2010. The members do research related to social norms and discourse, and consequences for interaction and behaviours. The main research themes include: Practices in the child welfare service; Sexual citizenship; Changing notions of families; and Developmental psychology.

The group consists of one professor, one assistant professor, and one PhD candidate. Two associate professors and one senior research fellow are affiliated members of the group.

#### General comments

Two members of the group are financed by the faculty and there is no external financing yet. The group has national collaboration with other researchers at the University of Bergen, Finnmark University College, and University of Oslo, but no international collaborations so far. Collaborations with the public sector exist through grants, but it is not clear how this relationship works.

#### Scientific quality

The group members (in fact one of the group members) have published 12 articles in international peer-reviewed journals and two Norwegian/national publications in the past 5 years. Most of the articles are published in journals with relatively low impact factors.

Grading: Weak to Fair

#### Societal impact

There was little evidence that the research has yet had any impact on society. However, there is a need for research which is clearly driven by a desire to improve or change practice, for example, to increase evidence-based decision making. In order to achieve this, researchers need to have contact with practitioners and policy makers early in the research process so that studies can be designed with that purpose in mind.

#### Recommendation

The group should aim at strengthening international collaborations as well as collaborations with the public sector. The link with the Centre for health promotion presents a possibility for applied research, which could be exploited further. The group could also benefit from developing a publication strategy. The current method used is discourse analysis, but other methods could be developed alongside this qualitative approach to facilitate publication in Level 2 journals. The group should also seek external grants to support research activities.

#### 5.1.3.6 The Operational Psychology Research Group

#### Description of the Unit

The Operational psychology research group (OPRG) was established in 2005 as a new strategic research initiative, and was awarded a five year seed-grant from the Faculty of psychology to strengthen international collaboration and facilitate successful competition for external funding. Research is thematically focused on individual and social predictors of operational performance, as well as forensic psychology. The OPRG hosts relatively

diverse research competences, including experimental methods, survey research and qualitative/ theoretical studies.

The group consists of three professors, one associate professor, four professor II positions, three adjunct professor II positions, two postdoctoral fellows, one research fellow, and six PhD candidates. The professors constitute the executive group.

#### General comments

This is a strong research group with well-established international links. The group has been very active with regard to alternative funding sources. Building on seed grants from the faculty, the group has applied for external financing and been successful in obtaining funding. The group is a strong interdisciplinary research environment with national as well as international collaboration (with UK, Scotland, Sweden, U.S. and Canada), which is a strength. Visiting scholars are involved in all stages of research.

The primary strategy for the group is to publish high quality empirical research in international peer-reviewed journals. However, because operational psychology is a relatively new area of research with a significant applied focus, the group has also given priority to publication and dissemination of research results in Norwegian.

#### Scientific quality

The group has published 67 articles in international peer-reviewed journals, 12 Norwegian/national publications, and 41 books or book chapters in the past 5 years. The research is generally of a high quality with evidence of international standing in the field and evidence of contribution to theory and practice in organisational psychology.

#### Grading: Good to Very good

#### Societal impact

The group has not as yet considered the societal impact of their research sufficiently. Perhaps this could be explored more widely, for example, by developing links with academic departments of law.

#### Recommendation

The group could benefit from developing a future funding strategy in order to ensure continued progress. Moreover, the group should encourage their PhD candidates to spend time at research institutions abroad and offer opportunities related to future oriented industrial challenges.

# 5.2 University of Bergen (UiB), Faculty of Medicine and Dentistry, Helse Bergen HF, Haukeland University Hospital

## 5.2.1 Department of Clinical Medicine and Haukeland University Hospital

#### Description of the Department

The Department of clinical medicine and Haukeland university hospital consists of six sections of which two, Section for psychiatry, and Norwegian centre for sleep disorders, were evaluated by this panel. All sections have, however, an interdisciplinary focus, and thus research projects often include researchers from several sections. The department is led by a head of department, and each section has an appointed leader. In total, the department employs 132 persons, including 22 professors, nine associate professors, 17 professors II, two senior scientists, four researchers, 19 postdoctoral fellows, and 16 PhD candidates. Twenty-three PhD candidates graduated within the department between 2007 and 2009. The permanent staff has teaching obligations in their field of expertise, linked to the undergraduate programme in medicine. For those in temporary positions, teaching obligations are very sparse.

#### General comments and recommendations

The faculty of medicine merged with the faculty of dentistry in 2008 and this merger will be evaluated by July 2011. Approximately 500 candidates are enrolled in the PhD program with about 85 candidates defending their thesis each year. The faculty board has approved a new strategic plan for 2010–2014, which includes a research committee and a PhD program committee. The Department of clinical medicine has special focus on disorders of the brain and nervous system, diabetes, health issues of the mother and child, and gynecological cancer. Recruiting medical doctors into the PhD program is said to be challenging and the faculty has a special research program for medical students, "Forskerlinjen". Medical students from this program are given the opportunity to obtain both an MD and a PhD. Thus, there seem to be a good basis for developing research. Previous evaluations are said to have stimulated the development towards formation of stronger and better defined research groups. So, from the faculty point of view and the Department of clinical medicine, to which psychiatry belongs, there seem to be good conditions for further development of research in the field of psychiatry. The potential effects of different organizational changes in recent years in strengthening the research milieu should be evaluated.

#### 5.2.1.1 Section of Psychiatry

#### Description of the Unit

The research is mainly organized in collaboration with Haukeland university hospital, Division of psychiatry. There are five research groups: Bergen mental health research centre (BMH); Psychiatric and somatic comorbidity; Self-regulation in children with neuropsychiatric disorders; Psychosomatic medicine; and Longitudinal outcome of treated female alcoholics. BMH is the largest unit, with three subgroups: the Bergen bipolar research group, the Bergen psychosis research group, and the Bergen suicide research group. There is extensive collaboration between these groups. The main focus for all research groups is on biological factors in psychiatry, clinical studies, registerbased research, and co-morbidity studies. Each research group decides their own activity, but reports to the section head and to the department.

The section of psychiatry has six professors and six professors/associate professors in 20% positions, combined with positions as consultants. Three of the professors are over 60. Currently the section has 14 PhD candidates.

#### General comments

The organization is not straightforward. Inpatients are treated at Sandviken hospital outside of Bergen city, which is also the location of the Section of psychiatry, where six professors and six professors/associated professors in 20% positions are employed. There are a number of qualified researchers, especially in the BMH, with focuses on bipolar disorders, psychotic disorders (mainly schizophrenia), and suicide. The BMH-centre has weekly meetings and also organizes an annual research meeting. This research unit has established several databases, which will enable a number of future research projects to be undertaken.

The number of PhD candidates who have defended their thesis is rather limited – five in 10 years time. The number of current PhD projects is however 15. PhD candidate supervision is often done in collaboration with the psychiatric unit at Stavanger University Hospital.

Several of the professors are over 60 years of age, which means that there is a need for new recruitments in the future, but there is a worry that the university will not replace some of these positions because of the university's financial situation.

#### Scientific quality

The group has published 135 peer-reviewed articles, eight Norwegian/national articles, and 11 books/book chapters. The papers that are presented are of good quality, and some were published in international top journals. However, considering the number of qualified staff, the publication output is somewhat limited, although it has been increasing over the last two years. The leaders of the centre are also aware of this and foresee that the output will increase in the coming years, when results from the various databases will be available.

#### Grading: Good

#### Societal impact

The research at the Section of psychiatry is directed towards important issues like bipolar disorders, schizophrenia and suicide. The burden of these disorders for patients and for the society as a whole is great. There is still a need to develop diagnostic tools and treatment modalities. Suicide is also a major societal concern and the SIPEA study will certainly contribute to development in this field. The centre is collaborating with the National Centre for Suicidal Research and Prevention in Oslo. The group working on

psychiatry and somatic co-morbidity makes important contributions from a societal point of view, especially in the light of psychosomatic research being a rather neglected research area.

#### Recommendation

There is a solid base for important research in the areas that the unit has established, and it is important to nurture and develop it. The funding seems rather stable and the number of PhD projects has also increased. There is some collaboration with other units working in the same field, especially at the national level in Oslo and Stavanger. This should be continued and strengthened, for example with the Faculty of Psychology in Bergen. Norway, like the other Scandinavian countries, has the advantage of comprehensive registers that can contribute to the research. There is already some international collaboration, but this could be strengthened, especially as the partners in Oslo and Stavanger already have an established international network.

#### 5.2.1.2 Norwegian Competence Center for Sleep Disorders

#### Description of the Unit

The Norwegian competence center for sleep disorders (SOVno) was established in 2004 and has been located in the Division of psychiatry, Haukeland university hospital up until December 2009. From 2010, SOVno is located under the Department of thoracic medicine. The main tasks for SOVno are research and development, teaching in basic and clinical sleep medicine, counselling and guidance on a national level, and to inform patients, researchers and clinicians.

The centre has eight researchers and/or associated clinicians, among them four professors. One PhD candidate and one postdoctoral fellow are currently employed at the centre. In addition, about 20 PhD candidates are being supervised from members from the competence centre.

#### General comments

During the time period from 2005 to 2009, ten PhD candidates graduated with supervision by employees or associated members of SOVno. An additional three students finished in 2010. Thus, this unit has an impressive record with a number of publications and finalized PhD projects, considering the small number of staff. There is a clear multi-disciplinary approach in the work and the unit is collaborating with several institutions, and has also established collaboration internationally. There is a rather low basic funding to the centre, and it is therefore dependent on external resources, which might be difficult to maintain in the long run. The low number of staff makes the unit vulnerable to changes.

#### Scientific quality

SOVno has published 103 international peer-reviewed articles, 17 Norwegian/national articles, and 16 books or book chapters. The number of peer-reviewed articles is quite impressive considering the staffing. Quite a number of the articles are published in good international journals.

Grading: Very Good.

#### Recommendation

The main concern seems to be the number of staff and the low basic funding. Given increased funding, a recommendation from the panel is to recruit more researchers, particularly postdoctoral fellows and senior researchers.

# 5.3 Norwegian University of Science and Technology (NTNU)

## **Faculty of Social Sciences and Technology Management**

## 5.3.1 Department of Psychology

#### Description of the department

The Department of Psychology hosts six research groups: Evolutionary psychology and fundamental psychological issues; Cognitive, biological and neuroscience; Health, organizational, and communication psychology; Human development, learning and skill development; Risk psychology, environment and safety; Clinical adult psychology and ADHD in adults, personality, forensic psychology and health psychology.

Altogether 96 persons are employed at the department as researchers, including 18 professors, 27 associate professors, eight professor II, one postdoctoral fellow and 68 PhD candidates. Seventeen PhD candidates graduated at the department between 2007 and 2009. As is the case with the other departments of psychology in Norway, the department hosts the professional program in psychology.

#### General comments

The department has recently undergone a reorganization process, which resulted in groups being formed on the basis of research interest rather than focus on teaching. As some of them are small, they have for the purpose of the evaluation been merged into larger ones. However, there is a clear departmental strategy to move toward larger research groups collaborating on larger projects. The number of teaching courses has been reduced, leading to a somewhat decreased teaching load. Although the reorganization may be a step in the right direction, reorganizations are of course energy consuming, and the positive effect of it may be in the future.

The research groups do not have a clear management structure, which may be part of the explanation as to why there are so many research themes represented. The research activities in the groups are variable, both with respect to quality and quantity, and no common publishing strategy seems to exist. Working time is equally shared between research and teaching. At present, there are no specific incentives from the department to promote or reward research, or incentives for increased publication (except for a recently established research award given annually to a researcher on the basis of particular prominent publications), although it would be desirable if such were developed. The perceived need to have all areas of psychology represented in research at the department is especially evident here, and seems to be viewed as a strength. However, concentrating efforts may be fruitful, especially at a department that traditionally has been focused on teaching, rather than research. The department relies heavily on university funding, rather than on external grants.

# 5.3.1.1 Evolutionary Psychology and Fundamental Psychological Issues Research Group

#### Description of the Unit

The unit is an umbrella for two research groups, who share an interest in the theory of science in psychology. The main research areas are: antisocial behaviour in general, and investigations of sexual harassment and related issues from an evolutionary perspective; comparative cognition, which includes decision strategies in partner choice and in choosing whether to cooperate; how people choose partners and how they decide whether to have sex; history of psychology and the psychology of music. There are four associate professors and one PhD candidate in this unit.

#### General comments

This is a small research group, with individual researchers conducting research within their specific sphere of interest. One main focus is on evolutionary psychology (sexual choice), in which there is international contact and collaboration with an expert. Although the staff of the unit experience these research topics as being of limited interest for students and funding agencies, the panel does not share this rather negative view. No specific publication strategy seems to exist.

#### Scientific quality

The scientific quality and productivity is low. The group has been involved in six peerreviewed publications, four book chapters, and four Norwegian publications during the last 5 years. Most journals in which articles were published have relatively low impact factors.

#### Grading: Weak

#### Societal impact

So far, the research results generated in this group has had no substantial impact, either within the scientific community or on a societal level. However, given the public interest in evolutionary psychology, possibilities for future impact exist.

#### Recommendation

In order to increase scientific quality and quantity, the unit needs to focus on publishing their research. One way of accomplishing this would be to hire postdoctoral fellows. International exchange exists, in that staff reports attending and presenting at international conferences, but also in the form of emerging collaboration with an international expert. These efforts should be strengthened. Whether presentations at conferences result in international publications is unclear, but such publications would clearly be desirable and should be striven for. Thus, the panel believes that there are good possibilities for this unit to expand and develop, with ongoing collaboration with international expertise, and with relatively inexpensive data collection.

#### 5.3.1.2 Cognitive, Biological, and Neuroscience Research Group

#### Description of the Unit

The Cognitive, biological and neuroscience group consists of five groups, investigating encoding of chemosensory information in central neural networks, infant learning, and speech and language production, perception, processing, representation and development.

Two other groups are listed, but not further presented or described. Three professors, three associate professors, three postdoctoral fellows, and two professors II are employed at the unit. Two PhD candidates have completed their theses during the evaluation period, and five PhD candidates were affiliated with the unit at the time of the evaluation.

#### General comments

The unit is difficult to evaluate due to information lacking from three of the five groups/senior researchers within the unit. It is also clear that there is very little ongoing contact and/or collaboration within the unit. Much of the unit's research activity depends on laboratory work with advanced technical equipment. Technical staff are therefore required, but as a result of a reorganization, have been lacking or been insufficient. It is pointed out that this has had detrimental effects on the scientific output from the unit. The scattered locations of the unit seem also to have a hampering effect on the production. National and international collaborations with productive researchers exist, both in formalized (professor II) and more informal structures. Two of the PhDs are financed through the Marie Curie International Training Network.

#### Scientific quality

The publication record within the unit is unevenly distributed, with some groups being more productive than others. The unit has been involved in the publication of altogether 42 peer-reviewed papers, four book chapters, and one Norwegian publication. Many of the publications are published in journals with a reasonable impact (e.g., Exp Brain Res), but the majority is published in more specialized journals, with lower journal impact.

#### Grading: Fair to Good

#### Societal impact

Research conducted within the unit is basic research, with little practical application at present.

#### Recommendation

This unit was part of a research group evaluated as excellent in the previous evaluation. The loss of more formal connection to this group and the lack of technical assistance in research areas depending on advanced technology, has had a negative effect on the scientific output. In order to regain strength, secure technical support is necessary.

#### 5.3.1.3 Health-, Organizational- and Communication Psychology Research Group

#### Description of the Unit

The research in this group focuses on industrial psychology, such as healthy organizational change processes and consumer behaviour of children. The unit consists of two professors, two professors II, four associate professors, one postdoctoral fellow and four PhD candidates.

#### General comments

The organization of the group is not clearly described and information is lacking for some projects. During the hearing, the research group was described as consisting of individual researchers conducting distinct research projects, lacking a common vision or research plan. The group is dependent on the PhD candidates to carry out projects. No specific

publication strategy appears to exist. With the information available, it is clear that there is no integrated and coherent strategy for the whole group, but rather fragmented and separated projects and subgroups. Previous efforts to prepare applications for external funding have to a large extent been unsuccessful, and it is not clear how to improve this situation. However, the group has collaborations with several national and international bodies.

#### Scientific quality

The scientific productivity of the group during the current assessment period consists of 17 peer-reviewed journal articles (some of them well placed in the ranking of the specialty), four book chapters, and another three Norwegian/national publications. The production is quite uneven among the members of the group, but the average number of publication is very low, taking into account the number of members of the group. The articles are generally published in low impact journals.

#### Grading: Weak

#### Societal impact

Some of the research results have the potential for societal impact, however the limited number of publications and the fragmentation of topics suggest that the impact at present is low.

#### Recommendation

The group should clearly consider its viability and potential for development. In order to become a competitive and integrated research group, important efforts and strong scientific leadership will be required. Another option is to consider merging the existing group into other groups at the department. The unit is active in teaching masters level students and a more structured strategy of the master's theses could be an opportunity to organize some research activities around the project of the groups.

#### 5.3.1.4 Human Development, Learning and Skill Development Research Group

*Note*: There was no representative of the group at the hearing. The department representative responded to questions formulated by the panel.

#### Description of the Unit

The research group is presently a loosely connected network of collaborating researchers and some more firmly established sub-groups. The research group as a whole was constructed for this evaluation. The group conducts research on epidemiology and normal development as well as intervention and treatment studies in infants, children, adolescents, and young adults. The topics include speech and skill development, as well as more biologically oriented research. Approaches and methods used are epidemiological methods, lab research, questionnaire and assessment tools, qualitative studies, and evaluations of treatment and interventions.

The unit consists of three professors, four associate professors, one postdoctoral fellow, and 13 PhD candidates - 12 of them being externally funded. Nine research assistants are also externally financed, together with one administrative person, and three senior researchers (not yet recruited).

#### General comments

Some sub-groups are very active and successful in obtaining substantial amounts of external funding, and it is reported that the success rate in grant proposals has been over 90%. The strengths of the group include large-scale studies with impressive databases, generating results that are likely to have an impact in the clinical field. The research is highly interdisciplinary, combining biological, psychological and social expertise. The members of the unit also have extensive national and international research collaboration, and they attract a large number of PhD candidates.

There is limited research collaboration within the group and group members are unequally productive. However, actions have recently been taken to cope with some of these weaknesses. The remedial steps include, for example, regular meetings where drafts or publication ideas are presented to colleagues. The clinic teaching activities are well organized and with a good internal environment, indicating competent management.

#### Scientific quality

The group has published 32 peer-reviewed journal articles (some of them in well-known international journals), 19 books/book chapters, and seven Norwegian/national publications. Given the number of researchers in the group, the databases, and the success in acquiring external grants, the publication record is not impressive – neither with regard to quality, nor quantity. The strong variability in terms of individual productivity among the group's members, and the fact that some projects have hardly produced any publications, suggest that it is possible to increase scientific productivity and quality. An analysis of the potential outcomes of the different projects could help to identify more effective strategies for future research planning.

#### Grading: Fair to Good

#### Societal impact:

The research carried out by the group has clear implications for society. Epidemiological research is of interest for policy makers and provides relevant knowledge for professionals and practitioners. Moreover, research dealing with developmental psychological processes should produce knowledge and guidelines for interventions to improve quality of life of children and families. Finally, the evaluation of treatment and intervention programs, methods and techniques may contribute to develop more effective services that should improve the return of investment of those social programs.

#### Recommendations

The aim for this unit must be to increase the number and quality of publications. Given the rich databases and generous funding situation, this is clearly possible. Some actions aiming at creating a stable and more productive research unit have already been initiated (e.g., publication incentives, and promotion of communication and scientific discussions among group members and PhD candidates). These actions should be continued, and supplemented with hiring postdoctoral fellows, rather than recruiting more doctoral students. The potential for this group is viewed to be high.

#### 5.3.1.5 Risk Psychology, Environment and Safety Research Group

#### Description of the Unit

The group was formed in 2007 in order to foster collaboration in research and education. The group conducts research in the context of social psychology, focusing on risk psychology, environment, and safety. The focus is on social and behavioural aspects of environmental and technical issues, individual reactions, group processes and communication, modelling development as well as theoretical reflections on ethics, security issues, risk and crisis. The projects are organized in three research areas: 1) Central social psychology topics, 2) Risk and safety issues and 3) Environmentally significant behaviours and sustainable consumption. The unit consists of three professors, two associate professors, one professor II, one guest researcher and two PhD candidates.

#### General comments

The aim of the group is to develop "knowledge and practice within relevant societal frameworks in close collaboration with colleagues in cross-disciplinary national and international networks". This group presents a well-structured organization that has been developed in the last few years with seminar series, joint supervision of students, and the preparation of an annual report.

Projects are either funded by internal university funding or by national or European funding sources. In many instances, cross-national and cross-disciplinary cooperation is evident; the group has well-developed links and cooperation with national and international research teams, and are active in a number of national and European groups, networks and official bodies. Recently the group has joined the Reliability and Safety studies Network and also SINTEF. The group includes researchers from Norway, Germany, Sweden, The Netherlands and China, several of whom have joined the group during the last five years.

#### Scientific quality

During the period under evaluation the group has published 14 articles in peer-reviewed journal, four book chapters, and one Norwegian/national publication. The number of publications is limited (especially taking into account the number of projects recently finished or in progress), but seems to have increased across the period under evaluation, probably reflecting the progressive incorporation of new members.

#### Grading: Fair

#### Societal impact

The societal impact of the research in this group is so far low.

#### Recommendation

There are a large number of ongoing or recently finished projects – actions to finalize the results into articles to be published in high quality peer-reviewed journals are needed. In the process of consolidating the unique focus of the group, it would be important to make progress with regard to integration of the research agenda. In order to be able to increase the number of postdoctoral fellows and PhD candidates, recruitment and selection strategies and external funding are necessary. Further internationalization should be

striven for. Progress in these areas should improve the quality and quantity of scientific production.

# 5.3.1.6 Clinical Adult Psychology and ADHD in Adult, Personality, Forensic Psychology and Health Psychology Research Group

#### Description of the Unit

The research is organized in three different domains: Clinical adult psychology (outcome and process research on psychotherapeutic interventions on psychiatric disorders); Forensic psychology (quantification of risks) and ADHD; and Health psychology (resilience and risk factors for psychopathology and in cancer). The unit consists of five professors, six associate professors, and one professor II. In the last five years, seven PhD candidates and one postdoctoral fellow have been recruited to the unit, and seven PhD candidates have graduated.

#### General comments

Most of the researchers have, in addition to their research experience, a high degree of clinical experience and qualifications. Most of the treatment research projects are conducted by researchers (therapists) within the unit. Many of the treatment projects are of high relevance to health professionals. The description of this unit, as of others in the department, reflects a subdivided structure of small research groups, with little evidence of collaboration between research projects. The different projects have clearly very interesting high-quality data, which over the next few years have the potential to become the foundation for high impact publications related to outcome and mechanisms of change involved in psychological treatment.

Funding has mainly been internal, with some resources from NTNU, the Regional Health Center (Regional Helseforetak) and the Norwegian Cancer Association

#### Scientific quality

The publication record over 5 years is of 10 book chapters and 88 articles, 73 in peerreviewed international journals. Thus, the group is relatively productive and many of the publications are in journals with a solid reputation (Curr Opin Psychiatr; Addict Behav; Behav Res Ther).

#### Grading: Good

#### Societal impact

The work of the unit has the potential to lead to better psychological treatment of psychiatric disorders; better understanding of the connection between risk factors and (mental) health; better understanding in assessing and predicting risk factors for future violent behaviour of psychiatric patients, released prisoners, and adolescents in contact with child custody services.

#### Recommendation

The research program of the unit as evaluated would benefit from greater collaboration in more focused and long-term projects. A more focused publication strategy, with the aim to publish fewer articles in high-impact journals, rather than many in low-impact journals,

should be striven for. The panel believes that there is good potential for the future as part of a more integrated department, a direction in which the department is currently moving.

# 5.4 Norwegian University of Science and Technology (NTNU), Faculty of Medicine and St. Olavs Hospital, Trondheim University Hospital

## 5.4.1 Department of Neuroscience

#### Description of the department

The Department of neuroscience was formed in 2003, when three smaller departments were merged. It consists of seven sections of which two, Adult psychiatry and the Regional centre for child and adolescent mental health, are evaluated by Panel 6. The head of department and an operational team, which consists of leaders from the different sections, lead the department. The department has access to large cohorts and registers (HUNT, MRI-HUNT, HUNT biobank, and others).

A total of 134 persons are employed at the department, including 17 professors, 17 associate professors, 17 professor IIs, eight researchers, five postdoctoral fellows, and 33 PhD candidates. Thirty-two PhD candidates graduated within the department between 2007 and 2009. Most research groups consist of clinicians whose positions are linked to clinical work.

#### General comments

Reorganisation has been a feature of many of the units that have been evaluated and it has not always been seen positively, but here it appeared to have led to administrative changes which support and foster research. The full effect of these changes cannot yet be evaluated, but this element was very impressive.

#### 5.4.1.1 Adult Psychiatry

#### Description of the Unit

The Adult psychiatry unit consists of persons performing psychiatric research with affiliation to St. Olavs Hospital, Institute of Neuromedicine, or both. The research covers a large area of psychiatry and behavioural medicine. Main research themes are affective disorders, anxiety disorders, and forensic psychiatry, but the unit is also involved in other areas of research, such as sleep, learning disabilities, ADHD, transcultural psychiatry, eating disorders, psychoses, alcohol and drug abuse, personality disorders, pathological gambling, personnel reactions to work incidents and conditions, and education of health workers and patients. The group utilizes data from large databases (HUNT), conducts clinical trials, observational studies as well as experimental studies involving imaging techniques.

The unit consists of three professors, one professor II, 11 associate professor IIs, nine researchers (many with combined positions as associate professor II), and 29 PhD candidates.

#### General comments

This unit conducts research on a wide range of areas. There is said to be conflict between the wish of the university to have focused research in a few areas and that of the hospital to address wide-ranging areas to enhance local expertise. A greater focus would allow the strong areas to develop.

#### Scientific quality

The publications cover an extensive range of fields and quality is variable, but some publications are really good and are published in high quality journals. The publication record over 5 years is of 163 articles in peer-reviewed journals, 14 book chapters, and seven Norwegian publications.

#### Grading: Good

#### Societal impact

Most of the topics investigated are such that the results may have a direct societal impact.

#### Recommendation

Continue with present course but pursue attempts to make full use of the HUNT data base, as planned, and extend the genetic studies. The excellent Norwegian databases could support genetic as well as epidemiological studies. In this centre, where systems of research support are well developed, the necessary statistical assistance for this work should be available and the genetic and pharmacogenetic work already undertaken could be further developed.

#### 5.4.1.2 The Regional Center for Child and Adolescent Mental Health

#### Description of the Unit

The Regional centre for child and adolescent mental health for central Norway (RBUP Midt-Norge) was established in 1994, and serves 87 municipalities in three counties. The research focus is on longitudinal, epidemiologic and prevalence research on child and adolescent risk populations in the community and randomized control trials of clinical and low-threshold interventions. Specifically, the group's theme is psychiatric disorders and developmental precursors (e.g. parenting, cognitive functioning), children's psychological wellbeing, and social functioning. The group aims at gathering and analysing fMRI data and genetic information from their samples.

The unit consists of 5.6 associate professor positions, shared by seven persons, and 1.5 professor positions shared by two persons. In addition, there are 13 PhD candidates at the unit. Six individuals have completed their PhD thesis in the past five years. The staff has a 40-60% teaching obligation.

#### General comments

The unit has a clear multi-disciplinary approach and the research activities are quite diversified, which on one hand is positive as many research areas are covered, but also leads to resources being spread out. The centre is engaged in as many as four randomized clinical trials, with a focus on low-threshold interventions in schools, but also more cognitive behavioural therapy for adolescents with self-harm and anxiety disorders. Much research is also done with HUNT data. The staff has an international composition, with British, Swedish and Norwegian members, and a few of the PhD candidates are also from

abroad. The unit is collaborating with several other institutions nationally and internationally.

#### Scientific quality

The publication list consists of 68 international peer-reviewed publications, 15 Norwegian/national publications, 17 books or book chapters. Given the number of senior researchers and the available databases, this is a relative modest output. Some articles are published in journals with relatively good reputation (e.g., Pain), but far too many are published in Nordic or Scandinavian journals (e.g., Scand J Psychol, Nord J Psychiat).

#### Grading: Fair to Good

#### Societal impact

The focus on children in child welfare institutions, children with low birth rate, and riskand protective factors in pre-school age, are all topics of general interest and importance. The interest in low-threshold interventions in schools and for adolescents with suicidal behaviour and anxiety disorders could have a more general societal importance.

#### Recommendation

The diversified approach in this unit may be a disadvantage in establishing a research milieu with high quality. The intention to focus on the three major projects: 1) depression in adolescents, 2) follow-up of 600 adolescent child in-patients, and 3) risk- and protective factors in pre-school age for mental health and psychosocial development (in collaboration with Department of psychology), seems to be a good strategy. The dependence on funding from the health directorate appears to be problematic, stressing the need to obtain external funding to cover research areas that might not be on the political agenda. The focus on low-threshold research is important and gives this centre a specific research profile in relation to the other three regional centres in Norway. The unit is successful in engaging new PhD candidates, and this should be further encouraged.

# 5.5 University of Oslo (UiO), Faculty of Social Sciences

## 5.5.1 Department of Psychology

#### Description of the department

The department is 102 years old and is the oldest psychology department in Norway. It consists of five units: Clinical and personality psychology; Cognitive neuroscience; Social, cultural and health psychology; Developmental psychology; and Work and organizational psychology. Some of these units were put together purely for the evaluation. The professional psychology program was launched in 1959. Additionally, a BA program was started in 2003, and a MA program in 2004.

The department employs a total of 125 persons, including 31 professors, 22 associate professors, eight professor IIs, four researchers, eight postdoctoral fellows, and 39 PhD candidates. Forty PhD candidates graduated within the department between 2007 and 2009.

#### General observations and recommendations

The financial situation of this department has improved considerably over the years and they are in a good financial situation now. The funding for research comes largely from internal sources, for example through university-financed PhD grants, and the department does not have a good track record of securing external funds (though there are exceptions). The department currently has 140 PhD candidates registered with them, but only 30 PhD candidates are conducting their research at the psychology department.

This department, like all psychology departments in Norway, has a heavy responsibility with regard to teaching, feeling the need to cover all fields of psychology - in both research and teaching. All permanent staff have 47% of their time allocated to research and 47% to teaching. However, it seems as if the department could offer staff who have secured funds for research some extra time to manage their research projects, and could also credit them teaching hours for having PhD candidates. The department may want to consider moving further towards a system in which high quality research output leads to a reduction in teaching load, and in which some department members primarily have educational responsibilities.

Like many departments, one of the factors that could impact publication output and research quality is that the very productive senior members of the department are approaching retirement. This is also a problem here, but measures have been taken through the Double Competence program to recruit younger PhD candidates. These are long-term plans, and the panel also suggests that efforts be made to create a more competitive recruitment of new, productive research leaders, nationally or internationally. Post-doctoral positions could attract high-quality international candidates to the department and also provide additional mentoring for the large cohort of PhD candidates, as well as support for the associate and full professors who are heavily burdened with teaching and administration. The postdoctoral fellowships would also enable young

researchers to develop their research careers, and increase the likelihood of publication in high quality journals

There needs to be a greater effort directed towards securing external funds. The department may want to explore multidisciplinary links to increase the likelihood of success with external international funding bodies through the formation of alliances. The department should have good opportunities for collaboration with applied units and this appears to be occurring with their links with hospitals and the various institutes (e.g. the Norwegian Institute of Public Health). However, the department could enhance this even further to facilitate knowledge exchange and in order to develop joint dissemination strategies. This might also help clarify and unify research goals.

#### 5.5.1.1 Clinical and Personality Psychology

#### Description of the Unit

The unit of Clinical and personality psychology consists of two groups evaluated separately in 2004 (i.e., "Epidemiology, genetics and mechanisms" and "Clinical psychology – psychotherapy and development"). A significant part of the work in the unit is related to development of methods, such as methods of assessment, and methods applied in large-scale longitudinal and general population-based research on topics such as intelligence, psychopathology and mental health, and quality of life. The research covers professional development, process and outcome of psychotherapy, clinical supervision and theory development. The unit is responsible for the teaching and practical training within clinical and applied psychology, including psychotherapy training and personality assessment, and thus has a substantial teaching load.

The group currently consists of 11 professors, seven associate professors, four professor IIs, two researchers, four post-doctoral researchers, and 38 PhD candidates. In addition, 25 PhD candidates are co-supervised by researchers from the unit. Twenty-seven individuals have completed their PhDs during the past five years.

#### General comments

This is a group that is at a point of transformation, due to the mean age of the staff being high, with 17 out of 25 staff being close to retirement (born 1950 or earlier). At present, there is no apparent strategy for how to combat the challenges of a shrinking unit, other than to train a new generation of researchers in the "Double competence program", from which graduates gain research competence as well as clinical expertise.

Some of the senior researchers appear to have affiliations and their main research activity at other places, and it is difficult to assess to what degree they contribute to the research atmosphere at the unit. Thus, this is not a coherent group, but rather numerous projects and sub-projects, and it seems that the group lacks research leadership and organization.

The research is funded by different sources. The two major clinical research programs and a study of victims' perception of reparations after conflict are based on grants from the NFR.

#### Scientific quality

The group has published 232 articles in peer-reviewed journals, 35 Norwegian/national peer-reviewed articles, and 90 book chapters or books in the past 5 years. Some publications are in high-impact journals (i.e., Arch Gen Psychiat; Am Psychol) but the publication record is uneven, both with regard to quality (high- and low-impact journals) and quantity (with some researchers publishing substantially, and others with a more limited output). Thus, the scientific quality has been good, but what will happen 5 years from now is difficult to predict, given the number of staff who are close to retirement.

#### Grading: Good

#### Societal impact

The research conducted in this unit has the potential to be of general interest and to influence our understanding of psychotherapy, personality, and mental health. Some of the research conducted in this group has been well received and acknowledged by the research community, thereby having a societal impact.

#### Recommendation

A large number of the staff will relatively soon retire and part of the unit will move, or already has moved, to other institutes. A strategic plan needs to be made as to how to rebuild this group, if continuation of the unit is wanted. Although the double competence program as a means for replacing faculty may be valuable in the future, active recruitment of senior researchers, rather than junior, to the successful research groups is most likely necessary if the positive development in this unit is to be maintained. The group should also make the most of its collaborations with health services and other groups.

#### 5.5.1.2 Cognitive Neuroscience

#### Description of the Unit

This group was established as a Centre for the study of human cognition following the NFR's centre-of-excellence competition in 2006. The group has a multi-disciplinary approach to the study of human cognitive information processing, combining basic and applied research, and also combining cognitive psychology with modern brain imaging techniques (ERP, MRI, fMRI). The unit is organized with reference to a number of larger research projects and programs, including: Cognition and plasticity over the lifespan; Dementia and neurogenetics of ageing; Traumatic memories; Cognition and emotion; Building the bridge between perception and memory; and the Cognitive psychology of eyewitness testimony.

The group consists of seven professors, two associate professors, four postdoctoral fellows, one researcher, one Professor II, and seven PhD candidates. The unit has responsibilities to teach in the professional program, and administers a masters program in cognitive neuroscience. Thus, the unit has a substantial teaching load.

#### General comments

This is a highly competent group, using state of the art techniques to address important issues while considering these matters from innovative points of view. This group uses structural and functional MRI, EEG, ERP, genetic testing and other up-to-date methods to address important questions in relation to dementia, ageing and cognition and emotion.

The direct questions they seek to address are innovative and important. They are also involved in the cognitive psychology of eye-witness testimony. In this respect, they produce articles aimed at a legal audience. Each staff member is part of several networks; thus, there is extensive research collaboration within the group. Individual members are also engaged in externally organized, national research projects or networks. Notable also is the relatively young age of the staff of this unit, ensuring the continuation of a fruitful line of research.

#### Scientific quality

The group's contributions overall to the general scientific literature are strong and in high quality journals (e.g., PNAS, Cereb Cortex, NeuroImage). The group has published 213 articles in international peer-reviewed journals, 10 in Norwegian/national peer-reviewed journals, and 21 books and book chapters in the past 5 years.

#### Grading: Excellent

#### Societal impact

The potential for societal impact of the work especially in relation to dementia and mild cognitive impairment is high.

#### Recommendation

The other groups in the department could build on the success of this group and perhaps successful members of this group could serve as mentors for other groups. For example, there should be opportunities for this group to strengthen the Developmental psychology group (see below). The Cognitive neuroscience group is applying for centre-of-excellence status again, and we suggest that they build on their strengths and continue to aim for Level 2 publications and funding. Impacts of the research, national and international, should also be maximized. Sustained access to adequate scanning facilities is a concern, and it is important that this is maintained in view of the value of the research. We have no other recommendations for this group, because they meet the criteria of excellence already, other than to keep up the good work.

#### 5.5.1.3 Social, Cultural and Health Psychology

#### Description of the Unit

The Social, cultural and health psychology group is organized as two main interlinked sub-groups: one focusing more on cultural and societal psychology, and the other focusing more on health and social psychology. These two sub-groups have a leader (a position that rotates among senior group members), and each perform administrative functions, such as running the two streams of the department's masters program.

The unit consists of eight professors, five associate professors, and 16 PhD candidates. In the past five years, six PhD candidates have graduated. There has been only one postdoctoral fellow.

#### General comments

The unit is a forced collaboration between disparate groups with little coherence, making the judging of scientific quality as one group difficult. Clearly, the subgroup focusing on

cultural and societal psychology has the strongest publication record. There is no clear scientific leadership strategy or publication strategy. Five senior members of the staff are in their late sixties and will have to be replaced within the next few years. The scientific strength within this group lies in the individuals who have good publication levels, but it is not clear whether this will be sustained following retirement of senior staff. The group has limited access to research grants and little if any, external funding.

#### Scientific quality

While scientific publications have the top priority, this unit has also been active in producing textbooks (e.g. History of psychology, Social psychology, Early Intervention in Alcohol Problems) and teaching material for students, as well as books and book chapters intended for a broader audience. The group has published 64 international peer-reviewed articles, 20 Norwegian or national peer-reviewed publications, and 51 books or book chapters in the past 5 years.

#### Grading: Fair

#### Societal impact

Opportunities for applied research need to be exploited to secure funding and to increase the societal impact.

#### Recommendation

This group has good potential for improvement, since new appointments are coming up and these appointments can make a difference to the scientific output. However, external funding is needed to support the research activities of the group members. Applying for grants should be a priority, and credit be given to staff for time spent on applications. The group has the potential to develop collaborations with industry and health services. Developing a strategy for these types of collaborations could be useful in order to receive external funding.

#### 5.5.1.4 Developmental Psychology

#### Description of the Unit

This unit is involved in research concerning basic and applied developmental psychology. It includes a special cognitive development research unit (EKUP), which is mainly funded by the governmental Department for Children and Equality (Barne- og likestillingsdepartementet). The research covers a range of topics, including social cognition, emotion, communication and language, moral, mental and physical health, behaviour disorders and challenging behaviour, memory and witness psychology, memory of traumatic events, friendship in child and adolescence, early adverse influences, maternal drug use during the foetal period, assessment, education and rehabilitation, and child care, parenting and protection.

The unit consists of four professors, one associate professor, and twelve PhD candidates. Additionally, four PhD candidates are under co-supervision and two researchers are affiliated to the unit. In the last five years three PhD candidates have successfully defended their thesis, and another two have submitted their thesis and are presently awaiting the evaluation of the committee.

#### General comments

With the exception for EKUP, most of the research consists of independent projects that the researchers of the unit are initiating individually or in collaboration with researchers outside the unit or at the department. As is the case in other units within the department, research activities are competing with a relatively high teaching load. This group has potential for improvement and the applied focus of the researchers, for example in forensic psychology, is likely to attract funding and international recognition in the future. There is potential for future collaborations with external health care units, including research such as eye tracking in autism, premature children and nutrition.

#### Scientific quality

The group has published 47 international peer-reviewed articles, eight Norwegian/national peer-reviewed articles, and 75 book chapters in the past 5 years. The group has not published in high-impact journals until recently. However, the recent trend to publish in international journals is promising and further progress is anticipated.

#### Grading: Good

#### Societal impact

On a national level, the group collaborates and communicates with the police department, who utilize the expertise from the group. On an international level, the research concerning how infants learn to predict actions, and a theory of mind interplay with executive functions, have had some impact.

#### Recommendation

The unit should strive for integration within the developmental group and with other groups in the department. An upward trajectory with regard to publications was noted, and this positive trend may continue, especially if further international links are fostered. There is also a potential for EU funding within these areas. There are opportunities to collaborate with the Cognitive neuroscience group and this should be explored. The two recent international appointments to professorship positions in this group are likely to significantly increase the research output in this group. We expect this group to improve their grading in future assessments.

#### 5.5.1.5 Work and Organizational Psychology

#### Description of the Unit

The unit has two main fields of interest: work and organizational psychology, and research methods, although most of the research activity in terms of publications and research projects is related to work and organizational psychology topics. The strategic topics of the unit are: Leadership in the public sector; Organizational climate measurement; Psychological contracts and Centre of positive work psychology, oriented to support organizational change in Norwegian organizations. The group has established a strategic cooperation with Vestfold University College regarding research on organizational aspects of maritime transport and logistics. Other projects focus on how to enhance learning effects of simulator-based training for operators in complex maritime operations, and to develop a novel approach to multi-modal quality assessment for audiovisual systems by considering cognitive, perceptual and affective quality attributes.

The group is responsible for a masters program in work - and organizational psychology, as well as several other courses at BA, MA and PhD level.

The unit consists of one professor, five associate professors, and seven affiliated PhD candidates.

#### General comments

There appears to be a structured plan for the research activities of the group. New opportunities for funding research (maritime transport and logistics, or the Centre of positive psychology) are being explored, and newly developed research projects have resulted in collaboration and joint publications among several professors at the unit. If a coherent and focused set of research topics is combined with the development of projects in those different sectors (which is important in order to obtain external funding), then a more synergies may emerge among the researchers and a more integrated program may increase the research outcomes.

Positive progress is noticed since the last evaluation, and the plans that are in progress may lead the group to a much more developed stage within 5 years. The group has both national and international collaborations (Europe, USA).

#### Scientific quality

The group has published 16 international peer-reviewed articles, 13 Norwegian/national peer-reviewed articles, and 26 book chapters in the past 5 years. Although quite a number of publications are in Scandinavian journals and books, there are some articles published in high quality international journals which indicates the potential of the group.

#### Grading: Fair

#### Societal impact

The projects described should have an impact on several relevant societal issues, especially related to work and organizations. The leadership improvement of public administration, or the assessment of the organizational climate, and providing survey feedback to the actors are important elements that can improve the productivity of the organizations and their employees and also improve employees' satisfaction and wellbeing. Moreover, several results obtained in research on psychological contracts are relevant for a better understanding of employer-employees relations. As this research often has been done in collaboration with organizations, the possibilities for transfer are higher than is the case in more basic research. The fact that research results have been published in handbooks and monographs facilitates the transfer and use of the research results.

#### Recommendations

As reported during the hearing, the further development of an integrated research agenda, in terms of research topics, taking into account the assets of the group and looking for more synergies and cooperation, can make the group more productive both with regard to quantity and quality of the output. Obtaining funding in order to increase the number of PhD candidates and research assistants should be a priority for the group. Thus, a careful analysis about the potential sources of funding (public and private) and an active strategy

to obtain them seems a clear priority for the development of the group. The planning and development of the Center of positive work psychology as a surrounding structure for other topics may contribute to the rationale of the research strategy, the visibility of the contributions, and to the development of the potentials of the group.

# 5.6 University of Oslo (UiO), Faculty of Medicine

### 5.6.1 Institute of Basic Medical Sciences

#### Description of the department

The Institute of Basic Medical Sciences (IMB) is one of three institutes under the Faculty of Medicine at the University of Oslo. IMB is responsible for medical education in preclinical disciplines, as well a master's program in nutrition. The budget allocated to IMB from the University is to a large extent based on its teaching responsibilities. The six departments of IMB are organized around classical disciplines as a stable platform for teaching. However, in a reorganisation in 2009, 22 thematic research units (TRUs) have been defined within the departments. Behavioural research is one of seven prioritised research areas, with one TRU within the area. The institute dedicates a substantial proportion of its internal resources to the TRUs, with some of the resources (e.g., for PhD candidate salaries) being subject to competitive application. Approximately 45% of each faculty member's time is to be devoted to research. The IMB defines behavioural research as an area of strength. Research includes studies of behaviour in animal models, health behaviour and coping, life quality and psychosocial aspects associated with somatic illness, clinical communication, professions in the health services, suicidal behaviour, and psychotraumatology.

A total of 270 persons are employed by the department, including 47 professors, 10 associate professors, three professor IIs, 32 researchers, 39 postdoctoral fellows, and 57 PhD candidates. Sixty PhD candidates graduated within the department between 2007 and 2009

#### General comments and recommendations

The IMB has a complex organization. Its funding structure is based on teaching responsibilities in medical training, but it has recognized that this is not a suitable basis on which to organize research efforts. As a result, the structure of prioritized research areas and TRUs is superimposed on the teaching department structure. In the view of the panel, this is a step in the right direction. But we recommend to the Norwegian authorities consideration of reform in the funding of medical education and health research which would allow a clearer and simpler structure for university-based research.

#### 5.6.1.1 Behavioural Sciences

#### Description of the Unit

The Department of behavioural sciences (DBS) is organized as one integrated research unit with three overlapping thematically defined research groups, each led by a fulltime senior faculty member. The research group on biopsychosocial aspects of health and disease conducts studies on psychosocial sequelae of somatic disease and psychotraumatology, suicidal behaviour, interventions improving patient quality of life, and epidemiological studies of psychiatric morbidity, disability and quality of life. The research group on professions (medical doctors and other professional groups) conducts research on aspects of health, work-stress and functioning among health professionals and students. Finally, the clinical communication research group involves studies of emotional communications in clinical encounters, experimental studies of provider-patient communication, evaluation of communication skills training, and communication and coping among cancer survivors.

The unit consists of three professors (full-time) and three adjunct professors (part-time), three postdoctoral fellows, and seven PhD candidates. In addition, 12 PhD candidates have their main supervisor at the unit. More than 60% of postdoctoral fellows and PhD candidates are externally funded. Since 2005, 18 PhD candidates have graduated within the unit.

#### General comments

This is a productive group, with substantial interdisciplinarity (psychology, sociology, medicine). It is an excellent learning environment for junior staff. But, despite the administrative efforts to cluster research into collaborative groups, at the base is still a structure where the primary unit is a professor and his/her junior colleagues and students. The external funding structure continues to encourage fragmentation of effort. As a relatively small group, it is vulnerable in a large organization in more or less continuous reorganization.

Five of the seven professors and associate professors are above 50 years of age and three above 60.

#### Scientific quality

The self-evaluation lists 273 articles in peer-reviewed international journals, 40 book chapters, and 29 publications in Norwegian during the evaluation period. Thus, the research productivity of this group is very high. Many of the articles are published in rather specialized journals, with somewhat lower impact factors (e.g., BMC Musculoskel Dis, J Adv Nurs), but also in those with higher impact factors (Schizophrenia Bull, Am J Psychiatry).

#### Grading: Very Good

#### Societal impact

Little is stated in the self-evaluation on this topic, beyond presentations to scholarly groups. The research topics are of obvious significance to the impact of medical efforts on society.

#### Recommendation

This clearly a very productive research conglomeration, but the research topics are diverse, and cooperation between different parts of the group appears more formal than substantive. It appears that the publication focus has been on quantity rather than quality, and the panel suggests that greater effort to publish in Level 2 journals be made – the group should clearly have the capacity to achieve this. Given the age structure of the senior faculty, there is a need for planning for succession. This should involve consideration of how a greater integration can be arranged between elements of the DBS, while taking into account that the present lines of research have each found productive

topical niches to fill. Consideration should be given to planning larger projects which use more resources across different subgroups of the DBS, perhaps including EU-funded projects. Another issue for consideration and solution is the lack of long-term career prospects within DBS, other than for those in professor positions.

# 5.7 University of Oslo (UiO), Faculty of Medicine and Oslo University Hospital, Institute of Clinical Medicine

This evaluation includes both Oslo University Hospital (OUH) and University of Oslo (UoO) as these have close collaboration and many active researchers have shared positions between the two organizations. The health and university sectors in the Oslo region have gone through several major organizational changes in the recent past. The results have been that three hospitals have been merged into one (OUH), which in 2010 had approximately 23 000 employees, in positions totalling about 18 500 person-years. This has also meant major structural changes, including concentration of activities in fewer locations. Collaborations between OUH and UoO have improved with these organizational changes. The hospital (OUH) consists of nine divisions: Mental health and addiction; Medicine; Surgery and clinical neuroscience; Women and children; Surgery and cancer medicine; Cardiovascular and pulmonary diseases; Specialized medicine and surgery; Emergencies and critical care; and Diagnostics and intervention. Two of these are included in the evaluation of Panel 6.

## 5.7.1 Division of Surgery and Clinical Neuroscience

#### Description of the department

The Division of Surgery and Clinical Neuroscience consists of eleven units, of which one, Neuropsychiatry and psychosomatic medicine, is evaluated by Panel 6. At the time of evaluation, the department had a total of 128 employees. These include two professors, three associate professors, 27 professor IIs, 13 senior researchers, one postdoctoral fellow, and 62 PhD candidates. Between 2007 and 2009, 30 PhD candidates graduated within the department. Many of the researchers have either heavy teaching loads or clinical duties, which compete with research activities.

#### General comments and recommendations

This is a wide-ranging unit with two main sections; the section including neuropsychiatry and psychosomatic medicine also covers neurosurgery, neurology, epilepsy, and neurorehabilitation. While this provides opportunities to study relatively rare disorders, the understanding of which may illuminate key issues in brain function, opportunities to study representative samples of those with commoner psychiatric problems are restricted. It is thus important that the advantages provided to the staff of the NPU by their close contact with other neuroscientists are maximized and that they receive strong research support particularly in the area of statistics.

#### 5.7.1.1 Neuropsychiatry and Psychosomatic Medicine

#### Description of the Unit

The Neuropsychiatry and psychosomatic medicine unit is based at Oslo University Hospital. Research activities are conducted in three areas: Clinical and basic functional and neurobiological characterization of bipolar II spectrum disorders; Endocrine influence on brain development and disturbance; and Frontal lobe contributions to the control of cognition, affect and behaviour. The unit utilizes structural (MRI volumetry, spectroscopy, diffusion tensor imaging) and functional (fMRI, PET, EEG/ERP) neuroimaging and molecular biological techniques in their research. They also have a genetic databank.

The group consists of one professor (part-time 20%), two researchers, two postdoctoral fellows, and nine PhD candidates. In addition, the professor supervises seven external PhD candidates. Four PhD candidates have completed their theses in the past 5 years.

#### General comments

This unit is closely allied to the general hospital, in particular to neurosurgery. Of necessity, they deal with relatively small numbers of participants in their studies, because the conditions involved (e.g., frontal tumours) are not common. Against this background they have developed the strategy of examining individual patients in depth with cutting edge techniques. Links to the excellent Norwegian registers allow the representativeness of the samples to be assessed, but particularly in the bipolar studies mentioned, issues of statistical power must be considered. As described, the work is more hypothesis-generating than hypothesis-driven.

An unusual style of paper authorship was described whereby not all of those involved in a study are necessarily included as authors.

#### Scientific quality:

In the past 5 years the unit has produced 83 international peer-reviewed articles, nine book chapters and two articles in Norwegian outlets. Several of the articles are published in journals with high impact; however, many of those authoring the articles have since then moved to other units.

#### Grading: Fair to Good

#### Societal impact

In view of the areas of study, the societal impact is potentially high, but as most research relates to basic questions, it does not have an immediate impact.

#### Recommendation

This unit seems to have lost important and productive collaborators during the assessment period, which eventually will become apparent in the publication lists. The remaining staff reports having many projects and results on the verge of being finished, and should focus on getting important results published. Obtaining statistical support may facilitate the process.

## 5.7.2 Division of Mental Health and Addiction

#### Description of the department

The Oslo University Hospital is the result of a process of mergers of hospitals and other health organizations in the Oslo area over the last five years. Clinical teaching departments have been merged into divisions in the University of Oslo at the same time.

The Division of mental health and addiction is the largest clinical division at Oslo University Hospital. It consists of seven units: Personality and psychiatry research; Norwegian centre for addiction research; Traumatic stress research; Child and adolescent psychiatry research; Psychosis research centre; Forensic psychiatry research; and Psychotherapy research. Core funding for research has been fairly stable during the transition, but funds from competitive sources have increased. A total of 156 persons are employed at the division, including 10 professors, eight associate professors, 11 professor IIs, 20 researchers, 11 postdoctoral fellows, and 50 PhD candidates. Between 2007 and 2009, 16 PhD candidates graduated within the division.

#### General comments and recommendations

The Division of mental health and addiction has experienced researchers with broad competence. On the one hand, it faces the difficulty of being spread physically into many separate sites. On the other hand, there appears to be good integration between hospital and university, and a reasonable division between research and administrative and teaching duties. There is a lack of long-term funding, which makes it difficult to recruit clinical senior staff. Advantages include access to large patient flows for clinical research, and the availability of technical platforms.

Since on the university side it operates as a clinical department, one structural problem for the division is that non-MDs cannot be hired as professors. Senior researchers that are not MDs have been hired, but these cannot teach, which is a major university priority. This lowers the division's competitiveness in attracting outstanding researchers, and several good opportunities have been lost due to this. There have also been problems recruiting postdoctoral fellows, due to the relatively low wages for these positions. Another general issue is that the idea of translational multidisciplinary research is new to the field of psychiatry, though it is starting to face the problem. Also, while the reorganizations have largely been accomplished, administrative reorganization continues, and is inevitably a substantial drain on research programs.

The previous evaluation was of course conducted before the various mergers of the last five years. Nevertheless, in the self-evaluation it is stated that major recommendations from the previous evaluation have been followed, notably in strengthening scientific leadership at all institution levels, and forming robust research united around more focused research.

#### 5.7.2.1 Personality Psychiatry Research

#### Description of the Unit

The research group for personality psychiatry has been a joint venture between Oslo University Hospital (former Ullevål University Hospital) and the Institute for Clinical Medicine (former Institute for Psychiatry) at the University of Oslo. The group's research focuses on: assessment of personality disorders, psychometrics of assessment instruments, reliability and validity of the current personality disorder constructs, the etiology of clinically important co-morbidities, personality dimensions as well as efficacy of day hospital and group treatment and the long term course of personality disorders. The group consists of 13 members including one professor, two researchers and one professor II, and four PhD candidates. During the evaluation period three PhD candidates have completed their thesis.

#### General comments

This is a small group with an informal organizational structure. It does not seem to be closely linked to the other units within the Division of mental health and addiction. There are however good collaborations with clinical units and with other countries. There is an impressive link with 17 treatment units across the country, reporting data via a central database.

#### Scientific quality

There is a reasonable level of publications in international and nationally recognized journals. The unit reports 32 papers in international peer reviewed journals, eight book chapters, and two Norwegian publications. However there is a lack of higher impact publications in leading international journals.

#### Grading: Good

#### Societal impact

There appears to be some societal impact. For example, the unit reports that it has had and is having input into the DSM V and ICD-11 personality disorder classifications.

#### Recommendation

Greater integration across different areas of psychiatry locally might help improve the quality of publications by integrating different areas of science and also considering an international as well as national perspective.

#### 5.7.2.2 Norwegian Centre for Addiction Research

#### Description of the Unit

Norwegian centre for addiction research (SERAF) is a clinically oriented drug abuse research unit and one of the major research units at Oslo University Hospital and the Institute of clinical medicine at the Medical faculty at University of Oslo. SERAF was established in 2007, building on a former smaller centre. The unit was established after receiving a grant from NFR in the Program for addiction research (NOK 10 million/year), as part of the Norwegian government's increased focus on addiction research. The unit currently receives 15 million in external funding per year, with substantial teaching obligations attached to the funding. SERAF's largest research effort is in opiate maintenance therapy (OMT) follow-up studies. Other research lines are in drug abuse comorbidity, prescription drug abuse, a comprehensive review of Oslo drug overdose deaths, and a project evaluating youth addiction treatment. Substantial collaboration is reported with the Norwegian Institute for alcohol and drug research, and some collaboration with other national and some international agencies.

SERAF consists of four professors, seven part time (20%) associate professors, four postdoctoral fellows, and 17 PhD candidates. So far, two PhD candidates have completed their thesis.

#### General comments

This is a relatively new research unit, which shows good promise. There are clear and appropriate plans for its development, including further improvement in the number and quality of publications.

#### Scientific quality

The unit reports having published 66 international peer-reviewed articles and 21 Norwegian/national articles. This is a good rate of productivity, and the self-evaluation reports that the impact factors of SERAF's publications are rising.

#### Grading: Very Good

#### Societal impact

SERAF's research has had substantial policy and clinical impact in the field of OMT. SERAF's research has also had implications for children of those on OMT, for some aspects of alcohol treatment, and for understanding and treatment of drug-induced psychosis.

#### Recommendation

SERAF is encouraged to continue on its current trajectory of filling a niche of research on treatment approaches to alcohol and drug problems, with some further broadening out beyond OMT.

#### 5.7.2.3 Traumatic Stress Research

#### Description of the Unit

The Traumatic stress research unit is linked to the Norwegian centre for violence and traumatic stress studies that was established in 2007. The intention was to build up an internationally recognized high quality research group in the field of traumatic stress, which includes a biological, epidemiological and translational research focus and with emerging international studies.

The group consists of one professor, two professor IIs, one associate professor II, one researcher, one postdoctoral fellow, and five to six PhD candidates. Three PhD candidates have defended their theses during the evaluation period. The unit is small and group members typically have their main positions in other institutions.

#### General comments

The unit is small but has very good international collaborations that are an important ingredient of its work. The aims are very ambitious, as they state they plan to cover the whole span of research from biomarkers and genetics to translational research. The challenge is in ensuring sufficient senior researcher time for projects because of competing demands and affiliations.

#### Scientific quality

The unit has been reasonably productive, with some 70 articles in international peerreviewed journals. In addition, the unit has 11 Norwegian publications and 10 book chapters. Some of the original papers are published in good quality international journals. The aim might be to increase the proportion of these to increase the dissemination and impact of findings to an international audience.

#### Grading: Good

#### Societal impact

The work has future potential to have international impact but it is difficult to ascertain current impact. Most of the published work appears to be observational.

#### Recommendation

It is recommended that the group focuses more on what it does best in an effort to further improve publications and to develop young researchers in this field. There are especially important opportunities for further developing research related to low- and middle-income countries.

#### 5.7.2.4 Child and Adolescent Psychiatric Research

#### Description of the Unit

This is a small unit that separated from the R-BUP approximately five years ago. The main area of research concerns children mental health problems, such as ADHD, autism, unspecific neuropsychiatric disorders, psychosis, and suicidal behaviour. The group has phenotypic description facilities combined with biological research and genetics. The group consists of one professor, two researchers, one post doc, one associate professor II, and five PhD candidates. One PhD candidate has graduated within the unit during the evaluation period.

#### General comments

The unit has few people and at present lacks critical mass. There are some potentially important projects that are currently underway including studies of ADHD and psychosis. There is no clear overarching scientific strategy at present, but the appointment of a new professor may help.

#### Scientific quality

There are rather few publications, some of which are in international journals. During the evaluation period the unit reports 25 peer-reviewed journal publications, 12 Norwegian publications and six book chapters.

#### Grading: Fair

#### Societal impact

The societal impact is limited at present, but there is the potential for future impact through current ongoing studies.

#### Recommendation

It is sensible, as the unit suggests, that it focuses on a specific niche. Collaborations with the psychosis group appear to be beneficial and such collaborations linking research across different age groups would be helpful. New appointments are critical for this group and will help strengthen ongoing research. Building on national and international

collaborations will also be important. Increasing cohesion within the unit and having an interdisciplinary mix of staff are suggested.

#### 5.7.2.5 Psychosis Research Centre

#### Description of the unit

The Psychosis research centre started in 2004 in an attempt to organize research from subgroups focusing on psychotic disorder. There is a clear organizational structure with a leader, several group leaders, a scientific advisory group, and local units established at different hospitals and departments in Oslo belonging to the university structure. The group is organized in a clinical group, a neuro-cognition group, a structural MRI-group, a functional MRI (fMRI) group, a molecular genetic group and a biostatistics group. The main research areas include early psychosis, drug abuse as a risk factor for development of psychosis, psychopharmacological studies, neurocognition in schizophrenia, structural MR studies of patients with chronic schizophrenia, fMRI and molecular genetic studies of schizophrenia.

The group consists of six professors, one associate professor, three senior researchers, five postdoctoral fellows, and 10 PhD candidates. Seventeen PhD candidates have defended their thesis during the past five years.

#### General comments

The centre is impressive, with experienced researchers in different fields, and it is interesting to see that it is possible to unite several separate research groups into a strong collaborative organization. The centre has been able to achieve a good level of funding up to now, and relies heavily on external funding. The question is of course if it is possible to maintain this high level of funding even if the governmental interest in funding psychiatric research might go down. A fairly large number of PhD candidates have graduated during the evaluation period. It has also created a good scientific milieu with weekly research meetings and additional seminars and workshops. The centre engaged in several national and international research networks.

#### Scientific quality

The publication list is rather impressive with 209 international peer-reviewed articles, some of them in very prestigious journals (e.g., Arch Gen Psychiat, Nature, PNAS). There are also 17 Norwegian publications and 23 book-chapters.

#### Grading: Excellent

#### Societal impact

Psychotic disorders and especially schizophrenia is a major public health issue involving a great number of persons, causing lots of suffering and often life-long disabilities. Prevention, early recognition and early treatment are crucial issues, as well as a deeper knowledge of the very nature of the disorders. Our understanding of the nature of this disorder is still not good enough to implement effective measures with regard to prevention and treatment, stressing the need for a multi-focal approach (present at the centre), involving clinical neurobiological and genetic research. The societal impact the research can have may be large.

#### Recommendation

This is a strong, productive, and excellent unit, and most recommendations are therefore redundant. It is important to have a strong organizational structure to keep the different directions of research together, and it is probably good to maintain a rather high level of internal meetings to strengthen the integrative aspects. It is also important to maintain the already established national and international collaborations. Based on the self-evaluation, there seem to be few collaborative projects with industry. Given the restrictions entailed in industry-funded pharmacological research, this is probably an advantage, but collaboration could, with care, be used to strengthen the psychopharmacological research area.

#### 5.7.2.6 Forensic Psychiatric Research

#### Description of the unit

The Forensic psychiatry research unit was established in 1998 as one of three Norwegian centres for research and education in forensic psychiatry. The unit's main obligations are 1) establishing connections between research and clinical work, 2) connect to the University of Oslo, and 3) be in close contact with the regional psychiatric security unit. The group's research concerns people with serious mental disorders and violent behaviour, sexual offenders, and prison inmates, and many of the research projects are initiated based on clinical needs. The centre gets its main funding from the health authorities. An associate professor (who is the research leader), one senior researcher, and one postdoctoral fellow are employed at the unit, together with a clinical psychologist. The unit currently has five PhD candidates. One PhD candidate graduated in 2009, being the first PhD candidate graduating at the unit.

#### General comments

The unit is still not formally connected to the University of Oslo, and there has been no formal leadership with regard to research until recently. In spite of this, the unit has published internationally, but also in Norwegian journals and books. It is apparent that the unit has focused very much on educational issues in the field of forensic psychiatry. There is predictable funding for the activities and a solid political and public interest in the field, which could secure continuous support and funding from the authorities.

At the hearing, some emphasis was put on the fact that the legislation regarding mental illness, crime, and forced psychiatric treatment is specific for each country, and it was implied that international collaboration therefore is of less interest. The panel does not share this view, and believes that it could be a reason for international collaboration. Also the different rules as regards participation of clients in the prison system and in the health care system, was mentioned as a problem.

#### Scientific quality

The unit has published 46 peer-reviewed articles over the evaluation period, 10 Norwegian publications, and 11 book chapters, which must be considered satisfactory when considering the limited number of staff. Articles are mostly published in specialised, but respected, journals.

#### Grading: Good

#### Societal impact

Violence is a great societal problem and research into this field is important. Prediction of violence in psychiatric institutions and in prisons is highly prioritized, as well as prediction of violence in persons with mental disorders. This issue is a recurring theme in mass media and contributes to the stigmatization of the mentally ill in society.

#### Recommendations

There is a potential for research development of the unit, especially with an appointed research leader. The research field is of general interest and the focus on violence and prediction of violence is promising. What has up to now been considered a limitation could instead be seen as a possibility, namely the differences between legal systems in different countries. An important research issue would be to determine the influence of the legal structure on the way the mentally ill are viewed and treated when they commit crime. The multiple approval systems involved when doing studies on individuals in the legal and in the health care system, is of course, a complication but should not be looked upon as a major obstacle. The field of forensic psychiatry is clearly multidisciplinary and it should be of interest to establish connections with the institutions for justice and criminology at the university.

#### 5.7.2.7 Psychotherapy Research

#### Description of the Unit

The Psychotherapy research unit conducts research on randomized clinical trials of psychotherapeutic treatment modalities. Specific projects include: study of dialectical behaviour therapy for those with suicidal behaviours; comparison of outcomes with shortand long-term psychotherapy; study of the effects of transference-interpretation work in therapy; and controlled studies of cognitive behavioural therapy for chest pain and palpitations, for those with hearing impairment, and during vocational programs for psychotic psychiatric patients. Five senior professors in psychiatry belong to the unit. A total of eight PhD candidates are involved in the studies. There are no postdoctoral fellows.

#### General comments

This is a relatively loosely organized group of five senior professors in psychiatry, with ages ranging from 54 to 67. There are obvious issues about succession planning, considering the average age of the staff. The grouping includes many researchers expert in randomized controlled studies (RCTs) in psychotherapy, which is a difficult field of study. RCTs take six to eight years from planning to first publication, which is a long enough period for it to be difficult to attract outside funding. The studies have to a large extent been without external funding, which means that only half as many PhDs have been involved and supervised as would have been possible.

#### Scientific quality

The group reports 87 publications in peer-reviewed journals, 11 Norwegian/national articles, and 23 book chapters. Some are published in high-impact journals (Am J Psychiat; J Abnorm Psychol). In an area of research where projects take considerable time, this indicates a good productivity.

#### Grading: Good to Very Good

#### Societal impact

In an era when evidence-based practice has become established as the gold standard, results of well-conducted RCTs have become of high policy and clinical relevance. Results of the studies are disseminated to professional audiences through clinical training programs, national and international seminars, and guest lectures, and more widely through public media.

#### Recommendation

This is clearly a group of researchers from an academic generation used to professors doing their research in some isolation from each other. In the context of the next generation, the research effort would benefit from more collaboration and collective work, not only with international colleagues, but also down the hall. However, given the ages of the professors and the lack of any clear succession, it is hard to see how this effort will survive into the next generation. It is worth some time and effort to consider how research enterprises in the specific area of this group might be organized to be most efficient and effective, and we recommend to the NFR and the University of Oslo that they do this from their respective viewpoints.

### 5.8 University of Oslo (UiO), Faculty of Medicine, Institute of Clinical Medicine and Akershus University Hospital

#### 5.8.1 Institute of Clinical Medicine, Akershus University Hospital

#### Description of the department

The UiO and Akershus University hospital are two separate organizations, but because of the close collaboration, and the fact that many researchers are employed at both the hospital and the UiO, these are evaluated as a joint organization. Within the Institute of clinical medicine, eight research groups have been identified. These are Cardiothoracic, Clinical neuroscience, Clinical and molecular oncology, Obstetrics and gynaecology, Surgical, Child and adolescent, Clinical and mental health services, and Health services. Of these, only the Clinical and mental health services research group is evaluated by Panel 6.

The department has a total of five professors, 11 associate professors, 17 professor IIs, 17 researchers, seven postdoctoral fellows, and 65 PhD candidates. Between 2007 and 2009, 13 PhD candidates graduated within the department.

#### General comments and recommendations

Akershus University Hospital is new as a university hospital (established in 2001). In 2009, the university activity at Akershus Hospital was organized into three divisions as part of the Institute of Clinical Medicine at University of Oslo. Since 2011, the leaders of these three divisions are included in the research leader network of the institute. The hospital has a central research committee with five members from Akershus and five from the University of Oslo. The research committee assigns strategic grants to researchers based on recommendations from external peer reviews of submitted research publications. The committee also assigns hospital research awards every six months to stimulate research. In addition, the hospital research centre also provides support for research administration, statistical and mathematical expertise and general advises concerning research design. Thus, it seems as if Akershus University Hospital has established a solid basis for support and development of research activities.

As regards funding, in 2009, Akershus Hospital allocated 35.3 million NOK and the University of Oslo 24 million NOK. External grants constitute 47-48 % of the total research funding for the hospital. The intention is to direct hospital funding towards groups with external funding. Although such strategy has some advantages, it may be a threat for the Clinical and mental health services research unit who, so far, has been dependent on hospital funding for its research. In the long run, this unit needs to obtain external grants, although the research areas may have some difficulties in attracting external funding.

#### 5.8.1.1 Clinical and Mental Health Services Research

#### Description of the unit

The unit was established in 2008/2009 and was given high priority by the director of the Akershus Division of Psychiatry. The main objective of the division is to do research with relevance for clinical practice and quality improvement in the clinical departments. The four main research areas are: mental disorders and physical illness; depression and its treatment in children and adolescents; health service research with special reference to service users; and caretakers and implementation and quality improvement in mental health services. The hospital and the psychiatric service are newly developed. External grants amount to 4.5 million NOK.

The research group consists of one professor, one professor II and three researchers. Eleven PhD candidates are funded and one student graduated in 2010.

#### General comments

The Akershus Hospital is a sizeable university hospital with the largest catchment area of a general hospital in Norway. The Division of psychiatry is large and should provide a good basis for clinical research and research on provision and organization of psychiatric care. It is promising that the director of the Division of psychiatry has given high priority to the research group. As the research topics chosen are not necessarily easy to receive external funding for, it is important that the research group obtains active support until it has established a position from which is will be able to attract external funding.

#### Scientific quality

The unit is newly established and most of the publications so far have been in areas where the staff has been involved earlier. However, the few publications so far are of good quality and some also published in good international journals. The unit has published 17 articles in peer-reviewed journals and three Norwegian/national peer-reviewed articles.

#### Grading Fair to Good

#### Societal impact

The unit has chosen to work with an area of great general importance: organization and delivery of care with a special focus on the experiences of users/patients and care givers. The unit has also an interest in developing qualitative studies, which may be important in order to broaden the knowledge base. In addition, there is an interest in conducting research in the border between somatic and psychiatric care, which is currently an underresearched area. Thus, the approach is interesting and promising from a societal point of view.

#### Recommendation

It is important to focus on the areas described in the self-evaluation, and to develop contacts with the decentralized specialized psychiatric service. This is a challenge and requires effort. Another promising area would be to investigate the consequences of the reoccurring organizational changes that have occurred in the Norwegian care community. As reorganization is common also globally, it would be of interest to develop methods to study the effects of the organization of care and the necessary collaboration between different kinds of caregivers that exist in a modern welfare state.

The relatively small number of staff is important to increase in order to reduce the vulnerability of the unit. The research area should be of substantial interest to the authorities responsible for the health care system in Norway, and they should consider funding it.

# 5.9 University of Tromsø (UiT), Faculty of Health Sciences

#### 5.9.1 Department of Psychology

#### Description of the department

As part of a recent reorganization, the Department of psychology was transferred from the Faculty of social science to the new Faculty of health sciences, thereby linking it more closely to the medical branch of the University of Tromsö. Research at the department is organized in four research groups: Cognitive psychology; Clinical psychology and mental E-health; Health and social psychology; Affective and cognitive neuroscience. The department as a whole employs 33 people, including 10 professors, nine associate professors, and six professor IIs and lecturers, and has a total of 16 PhD candidates. Between 2007 and 2009, 10 PhD candidates graduated within the department.

#### General comments and recommendations

The faculty and the department are promoting the organization of research into larger research groups, each with one research leader, as means of improving and stimulating high quality research, resulting in a clear and well-defined leadership structure. One aim of the department, which has been met, is that all staff members should publish. In accordance with the evaluation in 2004, allocation of resources to the research groups is based on scientific achievement. The organization and incentives of the department should facilitate, promote and, in the long run, generate high-quality research. Challenges to this development are related to the high teaching load associated with the professional psychology program, and also with the demand for a relatively small psychology department to cover all aspects of psychology. The department appears to solve this relatively successfully by distributing the teaching load unevenly, hiring personnel to cover teaching, and by focusing research into health-related topics. These strategies should pay off in the future.

#### 5.9.1.1 Research Group in Affective and Cognitive Neuroscience

#### Description of the Unit

The group is pursuing research in the field of neuroscience (pain and placebo; neurobiology of sexual behaviour; cognitive, motor and cerebral changes in aging; visual and spatial perception), investigating the relationship between brain and behaviour in humans and mammals with a multidisciplinary approach, including imaging techniques (ERP, MRI, fMRI), traditional psychophysiological methods (startle eye blink reflexes, skin conductance, EKG); site specific silencing of hormone receptor expression (iRNA/shRNA), and pharmacological techniques for stimulating and inhibiting neurotransmitter systems.

The group consists of two professors, two associate professors, one professor II, one postdoctoral fellow, one university lecturer, one part-time researcher at the University Hospital of North Norway, one engineer, and three PhD candidates.

#### General comments

The unit consists of four groups, loosely held together under a neuroscience umbrella. One line of research is directed towards brain imaging and dementia, but has so far not resulted in any publications. The more senior researchers are involved in international collaboration, oftentimes generating publications in peer-reviewed journals. A goal is to collaborate around a common theme, but so far this has not been accomplished.

#### Scientific quality

The number of publications in peer-reviewed international publications is 46, unevenly distributed among the six researchers holding a PhD. Research on sexual motivation is an especially strong research area, with a collaborative publication in PNAS, but research on pain and placebo research has also resulted in high quality publications. The unit has also been involved in three Norwegian publications and five book chapters.

#### Grading: Good

#### Societal impact

Most of the research in this area is geared towards basic research questions, with little practical implication as yet. Research on pain and placebo could have a societal impact in the future.

#### Recommendation

A successful trend in psychological research has been to use imaging methods. However, it is also clear that these methods require a well-developed infrastructure in order to generate high quality research. If this line of research is to be fruitful, a future challenge for the unit is therefore to build such specialized infrastructure. As one of the successful researchers is nearing retirement, strategic decisions regarding the future of this line of research need to be taken.

#### 5.9.1.2 Research Group in Clinical Psychology and Mental E-Health

#### Description of the Unit

The unit conducts research in clinical psychology and mental E-health. The research goals of the clinical psychology group are to deliver research on the mental health of all age groups, ethnicities, and patient groups. Research related to mental E-health is focused on the development of internet-based cognitive behavioural therapy for depression and anxiety, specifically in adolescents. Other research areas include brain injury and personality. The group has external funding from NFR. Two professors, three associate professors, and eight PhD candidates belong to the unit.

#### General comments

The unit seems to consist of two groups with, to some extent, different research focuses. As is evident from the publication list, the unit has large collaborative networks within and across the department, as well as in Norway and internationally, which enhances both research quantity and quality. The management structure is flat, with two senior professors sharing the task. Challenges include the breadth of the focus of research in the clinical psychology group.

#### Scientific quality

Scientific productivity is good, with evidence of some staff publishing in collaborative networks outside the unit. During the assessment period, the unit has been involved in 62 peer-reviewed publication, six Norwegian publications and two book chapters. The publication list is wide with regard to topics, including publications on brain injury, behavioural therapy, and personality. Although some articles are published in Norwegian journals, the vast majority of papers are published in rather well recognized journals (J Affect Disorders; J Intern Med).

#### Grading: Good

#### Societal impact

The research conducted within the unit has clear practical applications, specifically the internet based cognitive behaviour therapy developed with the aim to prevent depression among adolescents.

#### Recommendation

With the limited resources, both regarding financing and research staff, the scope of the research appears extensive. Although the two senior professors have been successful so far, a more narrow research focus may be fruitful, unless external grants are obtained to a greater extent and more postdoctoral fellows can be linked to the group.

#### 5.9.1.3 Research Group in Cognitive Psychology

#### Description of the Unit

The Research group in cognitive psychology was established in 2010 for the purpose of the present evaluation. Research is focused on topics such as implicit learning, counterfactual thinking, transformative learning, research methods, and object recognition. The unit consists of one professor, two associate professors, one professor II, and one PhD candidate.

#### Observations

It is clear that this unit was formed for the purpose of the evaluation, up until now lacking a common agenda. No strategy for publication and dissemination exists. Funding is secured through departmental resources, but also through external grants. The adjunct senior professor, close to retirement, appears to be the driving force behind many of the publications.

#### Scientific quality

The unit has been involved in 33 peer-reviewed publications, eight Norwegian publications, and in 17 book chapters. The adjunct professor is involved in most of these publications, oftentimes without a co-author from the Research group in cognitive psychology. The publication outlets consist of typical cognitive psychology journals, such as Cognition/Applied Cognitive Psychology, but also of journals with a more limited impact.

#### Grading: Fair

#### Societal impact

At present, the societal impact of this research is unknown.

#### Recommendation

As noted by the group, a future task is to attempt to reduce and focus the number of research areas. Recruitment of a senior researcher in the area who may lead and direct research would be valuable. If serious efforts are made to improve quantity and quality, a reduction in teaching load may be warranted, as members of the group are stated to be heavily involved in teaching activities.

#### 5.9.1.4 Research Group in Health and Social Psychology

#### Description of the Unit

This unit was established in 2010, when two groups, Health psychology and Social psychology, were merged into one. The research interests in the Health psychology group include psychological, social, and behavioural aspects of health and illness, for example stress management, and sleep and wake rhythm. The Social psychology group's research interests include basic and applied social psychology, for example, consumer behaviour and exercising behaviour. The group consists of five professors, two associate professors, and four PhD candidates.

#### General comments

There are two independent groups within the unit of Social and health psychology, with their own PhD candidates. There seems to very little communication between the groups. There is an attempt to develop networks at the European level and publish internationally, and to develop the PhD candidates as independent researchers. The head of the department has acknowledged that the publications are currently in low-impact journals, and aims to achieve 20% of publications in Level 2 journals in the future.

#### Scientific quality

The unit is very productive and has been involved in 134 peer-reviewed publications, 22 Norwegian publications, and 58 book chapters. Most of their publications are in journals with fairly low impact factors, which may be due to the fact that the fields of research are rather small. Examples of journals with a relatively higher impact factor (e.g., Arch Sex Behav; J Abnorm Psychol) also exist, but are few.

#### Grading: Good to Very Good

#### Societal impact

The Social psychology group is doing work on unconscious attitudes, including one PhD project funded by telecommunications with some potential for application and engagement with users of research. The group should engage more with users of their research and set up external collaborations.

#### Recommendation

The health and social psychology groups have overlaps in their research and would probably profit from further integration to form one coherent group. They can then join forces to engage in external grant writing to secure funds for research. The PhD candidates and post-doctoral fellows should also come together and be encouraged to

work with each other. It is clear that there is potential to attract external research funds and have a societal impact given the current research interests of the group. The study of unconscious attitudes is a promising avenue for future research and international collaboration, and formal links should be pursued with international researchers as well as relevant organizations (for example the advertising industry).

#### 5.9.2 Department of Clinical Medicine

#### Description of the department

The department includes 16 research groups, each of which has a research leader. The two groups assessed by this evaluation panel are the Psychiatric research group and the Regional centre for child and adolescent mental health. In the end of 2009, the Department as a whole employed 131 people on the university budget, including 21 full time (50% or more) professors, 24 part time professors (20%), 11 associate professors, and 25 part time associate professors (20%). In addition, the Department had 115 externally financed positions. The "Department of Nursing and Health Science" was separated from Department of Clinical Medicine from the beginning of 2010.

#### General comments and recommendations

There is a well-defined management structure in the Department of clinical medicine and clear leadership with incentives for research productivity. However, challenges include a broad focus of research, a large number of groups, many of which are small in size, and a location that makes recruitment of staff more difficult. With regard to the Psychiatric research group, threats to the department include the potential loss of a professorial post in psychiatry and the separation of child and adolescent psychiatry. Although a new professor in child and adolescent psychiatry is being appointed, at present the plan is for this post to be located in Paediatrics. It is not clear how this post will link with the Child and adolescent mental health centre or with the Psychiatric research group. There is thus the potential of further fragmentation.

#### 5.9.2.1 Psychiatry Research Group

#### Description of the Unit

This Psychiatry research group deals with a small population living in scattered and often rural circumstances. The interests of the staff are in psychiatric epidemiology, psychiatric health services, and in clinical health psychology. These areas include topics such as mental distress connected to seasonality; diagnostic practice at the departments; mortality of psychiatric patients; coping and satisfaction processes in surgical patients, and predictors for return to work; mental health issues in pregnant women, cancer patients, high school drop-outs; and transcultural topics. The group includes two professors, three associate professors, one professor II, one postdoctoral fellow, and 15 PhD candidates. There is a teaching obligation and the full-time professors spend approximately half of their time on research, whereas the associate professors spend less time. Between 2007 and 2009, there have been five PhD candidates graduating.

#### General comments

The small population is a difficulty for this unit, but they have assets including the data from the Tromsö Study (six waves from 1988 onward concerning mental distress in the community) and a register of all psychiatric admissions since 1980. Linkage of the two is

evidently possible. They are also aware of the opportunities to study the effects of northern latitude, but research effort here appears to lack focus.

#### Scientific quality

During the evaluation period, the unit has been involved in 76 peer-reviewed publications, nine Norwegian publications, and four book chapters. On the whole, publications are in good rather than very high quality journals, but their multiple publications in Soc Psych Psych Epid, a strong journal in the field, are to be commended.

#### Grading: Fair to Good

#### Societal impact

The societal impact of the group's research is potentially high. It is important to understand mental health in the community, and also contribute to the improvement of mental health services.

#### Recommendation

Efforts should be made to fully realize the potential provided by the excellent data sets and to focus research endeavour firmly upon the main areas of interest.

#### 5.9.2.2 The Regional Center for Child and Adolescent Mental Health

#### Description of the Unit

This unit is one of four Child and Adolescent Mental Health Centres that are located in different parts of Norway and which are financed by the Ministry of Health and Care Services. The mandate is to conduct research relevant for practitioners in the field, inform about and implement evidence-based interventions. The centre is responsible for post graduate training of all professionals in the field of children's mental health. This centre was established in 1992 and has been managed by the Department of clinical medicine until January 2011, when the centre became a separate department. There is a leader and 10 multidisciplinary scientific staff (among them, two professors and four associate professors). Since 2005 they have trained or are training six PhD candidates.

#### General comments

The centre is well placed for undertaking clinical translational research. The focus, by necessity because of the centre's mandate, has to be primarily on clinically-relevant research. The centre has undertaken and is undertaking a number of different intervention research projects. They have good links with the clinics, statistical support, and an active research link with a well-established US professor in child and adolescent psychiatry. There are competing demands between focusing on traditional research output and enhancing the quality of services and implementing interventions.

#### Scientific quality

Scientific productivity is relatively good for this type of research, with evidence of some staff publishing in international journals, although the publication profile is uneven. During the assessment period, the centre has been involved in 83 peer-reviewed international publications, 27 Norwegian publications, and eight book chapters. The research has focused on evaluation of prevention and treatments and systematic reviews.

There are a few papers in international/European Child Psychiatry Journals, although some reported publications relate to epidemiological work based in Finland.

#### Grading: Good

#### Societal impact

The work has had clinical translational impact locally as well as nationally. Some of the work has had additional international impact (for example in Russia). Other research would not necessarily be relevant internationally, or would be duplicated in other countries, for example, evaluations of specific well-established treatments.

#### Recommendation

A continued focus on intervention research, and ensuring that time and effort are allocated to producing high quality international publications as well as data collection, would be helpful. The aims have to be circumscribed, given the nature of the centre's funding and because of being small. The centre might benefit from further links with adult psychiatry to enhance critical mass for training. Collaborations with other treatment/prevention researchers in child mental health in other countries should be supported and further developed.

### **5.10 Stavanger University Hospital**

#### 5.10.1 Stavanger University Hospital

#### Description of the department

The Stavanger University Hospital is one of four hospitals within the Western Norway Health Trust. The hospital is organized into six divisions: Surgery, Paediatrics, Medicine, Psychiatry, Medical services, and Internal services. Recently, a research department has been established in order to strategically strengthen research activities. Four research groups are included in the assessment. These include cardiology, surgery, psychiatry, and the Norwegian centre for movement disorders. One of these, the Psychiatry research group, is evaluated by Panel 6.

The hospital had a total of 231 scientific staff members in January 2010. These included one professor, 15 associate professors, 16 professor IIs, 34 researchers, eight postdoctoral fellows, and 48 PhD candidates. Between 2007 and 2009, a total of 19 PhD candidates graduated within the hospital.

#### General comments and recommendations

Until 2000, research was a rather new endeavour at Stavanger University Hospital, but since 2010 there is a newly established research department with a director of research and a research board. Funding comes from the hospital itself, University of Bergen (infrastructure and employment of 12 professors and eight assistant professors), and external funding from the Western Norway health authority. Naturally, research being a relatively new enterprise, it is a challenge to give it high priority, but the newly developed research department may be a way to overcome these problems. The hospital focuses on clinical and epidemiological research, which seems to be a wise decision. The ambition to establish a faculty of medicine in Stavanger is understandable, but meanwhile it is important to maintain ties to the University of Bergen. It is noteworthy that Stavanger University Hospital has a strong international network, with collaborators in about 20 different countries, which is impressive considering the short time research has been conducted at the hospital.

#### 5.10.1.1 The Psychiatry Research Group

#### Description of the Unit

The research at the psychiatric division consists of three main groups -- the Regional centre for clinical research in psychosis (CRP), the Geriatric neuropsychiatric research group (GNR), and Alcohol and Drug Research Western Norway (Korfor) -- and several stand-alone projects. Korfor is responsible for managing the regional alcohol and drug research program of Western Norway.

The unit consists of two part-time professors, four associate professors (part-time), seven researchers (part-time), six postdoctoral fellows, and 11 PhD candidates. The unit has additional employees working on data collection and five visiting professors (part-time). During the last five years, 17 PhD candidates have graduated within the unit.

#### General comments

This unit has been very successful in their focused work on psychosis and more specifically on early detection and treatment of schizophrenia. Currently, the staff has little or no teaching obligations, which may explain their scientific productivity. There are two competitive groups, one focusing on psychotic disorders and the other on geriatric neuropsychiatric disorders. The third group, Korfor, is newly established (2007) and has just started their work. The unit has been productive, publishing 25-30 papers per year; 17 PhD candidates have graduated the last 5 years. Formally, the PhDs have received their degree at Bergen University, as Stavanger is not yet is established as a part of the University of Stavanger. The unit has established an intensive international network, with eight visiting professors in 2011.

#### Scientific quality

Over the period, the unit has published 151 articles in peer reviewed journals, several of them in top-quality journals. They have also published 10 articles in Norwegian journals and five book-chapters. The work on early detection and early treatment of schizophrenia is of high international standard and has also contributed to the development of this field in an international perspective.

#### Grading: Very Good

#### Societal impact

The three focal areas studied by the unit are all of great societal importance. Psychotic disorders, especially schizophrenia, are prevalent disorders, causing suffering and often life-long burden. The highly decentralized psychiatric specialist services in Norway offers good possibilities to find and treat psychotic disorders, and the way this unit has used this possibility is impressive.

The neuropsychiatric disorder of elderly persons is becoming an increasingly difficult problem because of the ageing population worldwide. Alcohol and drug abuse is also a great public health problem. Again, the highly decentralized treatment and care system in Norway offers special opportunities to develop early detection and intervention methods, which could be important not only from a national point of view, but also in an international perspective.

#### Recommendation

The success of the research on schizophrenia and psychogeriatrics is dependent on a few key persons. It would therefore be important to try to increase the number of staff to secure a continuation of the fruitful research. The planned study on primary prevention of psychosis will be an important contribution to the international community because of the favourable conditions for this kind of work in Norway. The large network of national and international collaborators is also important to maintain. However, the continuation of this requires stable funding. Regarding Kofor, it might be advantageous if the unit would focus on the development of treatment options in the decentralized system in which also the local communities have a responsibility. The policy of rewarding publications and PhDs appears to be a good strategy. The yearly schizophrenia congress is certainly also contributing to the interest in the research field, but it may also be (too) demanding with regard to resources.

### 5.11 Centre for Child and Adolescent Mental Health, Eastern and Southern Norway

#### Description of the Centre

The Centre is one of four regional centres in child and adolescent mental health funded by the Ministry of Health and Care Service. The Centre has two departments that have been included in this evaluation, the Research department and the Department of infant mental health. In total these two departments employed 35 persons (27 full time equivalents), 22 researchers (17 full time equivalents), two postdoctoral fellows, and 11 PhD candidates in December 2009. Researchers at the Centre were main supervisors to 10 PhD candidates who graduated between 2007 and 2009.

#### General comments and recommendations

The organisational structure is very clear, as are the aims of the centre. There appears to be a good infrastructure, while there are also competing demands with regard to undertaking traditional scientific research. A primary task of the centre is to contribute towards making sure that "scientific, practice-relevant, multi-professional evidence-based knowledge is available and can be used by professionals in the field". Dissemination of knowledge is thus a main task. There are numerous diverse research areas relative to the size of the unit. However, there is a new director who may be successful in enhancing synergy within and across the departments.

#### 5.11.1 Research Department

#### Description of the Unit

The Research department is multidisciplinary and includes four sub-units: Clinical research; Epidemiology and prevention research; Research methods; and Resilience research. Topics include causes and consequences of mental disorders and psychological problems, effects of treatment of mental disorders in children and adolescents, evaluations of implementation programs related to psychological problems, and the psychological consequences of somatic disease. The unit consists of 14 researchers, two postdoctoral fellows and eight PhD candidates. In addition, four PhD candidates are affiliated with the Research department, but have positions at other institutions.

#### General comments

The organizational structure is clear. There is a very diverse programme of research with many demands relating to data collection.

#### Scientific quality

The publication record within the department is uneven across different researchers, with some individuals showing very good productivity. The research on personality disorders is especially strong. There appear to be a number of studies currently in progress with the potential for future high-quality papers. During the evaluation period, the department

reported 128 peer-reviewed journal papers, 27 book chapters, and 24 Norwegian peer-reviewed publications.

Grading: Good to Very good

#### Societal impact

There is potentially important research on anxiety disorders and resilience that is likely to have future impact once results are published.

#### Recommendation

The Research department is undertaking a large amount of interesting diverse research. The work on resilience is especially novel. A greater focus of resources and time on specific research topics, more integration across different research areas and strategic scientific collaborations might help further enhance publications and the international impact of the Research department. It is recommended that the department considers focusing on a few key research areas and balancing demands between data collection and producing good quality publications to ensure a growing international profile.

#### 5.11.2 Department of Infant Mental Health

#### Description of the Unit

This is a small unit, established in 2006. The unit has eight researchers (four full time equivalents). The unit has a national mandate with staff members at four regional units. There is a clear focus of work on infant mental health. The studies include topics such as studies of children exposed to drugs prenatally and children of mothers with mental health problems, a validation study of the Alarm Distress Baby Scale, Norwegian infant's temperament, and a randomized clinical trial of an intervention based on Marte Meo method.

#### General comments

The unit, as well as undertaking research, has a translational and training remit. The team appears to have good international collaborations and good links with the other research centres and practitioners within Norway.

#### Scientific quality

The unit undertakes a very broad range of projects and activities. The focus on data collection might perhaps have affected output in terms of publications in international peer-reviewed journals. During the assessment period, the unit reports 31 peer-reviewed journal publications, 30 book chapters and six Norwegian publications.

Grading: Fair to Good

#### Societal impact

The unit conducts important work that is relevant to prevention. Future scientific output could provide evidence that has important policy, health- and social care impact. The screening and assessment methods are already having translational benefits.

#### Recommendation

The unit is small and it was considered that although implementation can be broader, given the size, realism is needed about the scientific research breadth. The unit could benefit from focusing on fewer projects that provide high quality evidence and that also can be published and have national and international impact.

### 5.12 Uni Research Ltd

#### 5.12.1 Uni Health

#### Description of the department

Uni Health is a non-profit basis limited company that is closely affiliated with the University of Bergen. The main focus is research, although some training is also conducted at Uni Health. Uni Health consists of nine units, of which one, the Centre for child and adolescent mental health, is evaluated by Panel 6. The institution is reported as having 115 employees, of whom half are part-time. There is a research director and autonomous units that are led by a senior researcher. The funding for staff, mainly employed part time, is obtained externally and the strategy is thus dictated by funding. A total of 23 PhD candidates graduated from within the institution between 2007 and 2009.

#### General comments and recommendations

The institution covers a very broad range of topics. Recruitment is not a problem and the institution benefits from collaboration. Although it is understood that the strategy is influenced by funding, the department would benefit from focusing on strengths and having a clearer research strategy. This would enable it to develop clear areas of expertise that are recognised nationally and internationally. A laudable feature is that a good share of profit is fed back into basic research. The panel thinks that Uni Health makes an interesting example of its kind for other Nordic universities.

#### 5.12.1.1 Centre for Child and Adolescent Mental Health

#### Description of the Unit

The Centre for child and adolescent mental health is a research unit and one of four equivalent centres in Norway with basic funding provided by the Ministry of Health and Care Services. The unit is involved in population-based studies of child and adolescent mental health (The Bergen Child Study), particularly with regard to prevalence, assessment, risk factors, and natural history of mental health problems. The unit will be taking part in a national longitudinal study, with data collection starting in fall 2011. They also do research on psychodynamic therapy with children and adolescents. The staff consists of 50 people, among them six professors, one associate professor, and nine researchers (three part-time). Fourteen PhD candidates have graduated at the centre during 2007 and 2009.

#### General comments

The centre has produced a broad range of papers. There are some collaborations but less evidence of strong international collaborations. The research strategy does not appear to be focused or integrate the different research areas, but this might be because of a reliance on specific funding. The unit undertakes research in epidemiology,

neuropsychiatry/biological research, infant developmental health, bullying and some prevention research. There is a good track record of PhDs.

#### Scientific quality

The unit reports 98 peer-reviewed journal publications, 13 book chapters and 28 Norwegian publications during the assessment period. There are some very good publications but the output of different researchers is very variable.

Grading: Good to Very good

#### Societal impact

The epidemiological research has potential impact on children's mental health in Norway and much of the work has translational relevance. However, the work thus far has yet to have substantial international impact.

#### Recommendation

At the last assessment it was recommended that the unit capitalises on the Bergen Child study. It is further recommended that building on this epidemiological work would be a good focus and niche for this unit. There is a need for a clearer, more focused scientific strategy. This could also help encourage a more even profile of scientific output across all the researchers. Collaborations with other epidemiologists may further help enhance research quality and the level of publications.

### 5.13 Modum Bad Psychiatric Hospital

#### 5.13.1 Research Institute Psychiatric Hospital

#### Description of the Unit

The Research Institute Psychiatric Hospital is organized as part of Modum Bad Psychiatric Hospital, which accepts patients from all of Norway for residential treatment of anxiety disorders, depressive disorders, personality disorders, eating disorders, traumatic disorders, family and relational problems, existential/religious problems, complicated grief, and burned-out syndrome. In addition, an outpatient clinic serving the local communities is part of the Modum Bad clinic, which also conducts research. The main reason for establishing the research institute was to enhance the quality of the hospital treatment in the above mentioned areas.

The unit consists of two full-time senior researchers, three part-time senior researchers, nine full-time research associates, three part-time research associates, and one administrative person, three postdoctoral fellows, and 10 PhD candidates. Five PhD theses have been completed between 2005-2010, and presently three are close to completion.

#### General comments

This is an important facility for all Norway for non-psychotic disorders, especially anxiety/depression, personality disorders, eating disorders, family and relationship disorders. The average length of stay is about three months. It is a secondary referral service, although admission criteria are unspecified. It is small, with few senior staff, some of whom are sick and others approaching retirement.

The publication record is relatively weak and, given the field and the number of available projects, essentially descriptive. In that inpatient care for non-psychotic conditions is nowadays very unusual on a world-wide basis, it is difficult to see how the findings would be generalized to other circumstances. On the other hand, the uniqueness of the facility could be considered an asset. Funding has always been mainly local, and they have not sought EU resources.

For the future, it would be advantageous for the unit to focus their efforts on fewer areas; a suggested area for focus concerns the difficulties of health service personnel, who appear to form a substantial portion of their clientele. Management of illness in such individuals and factors promoting adjustment and resilience in health service personnel are nowadays issues of international concern.

#### Scientific quality

The bibliometrics are fairly low. The type of care does not lend itself well to the hypothesis-driven, experimental studies focusing on quantitative measures which are favoured at the present time, and their publications are essentially descriptive. The institute has published 69 articles in peer-reviewed journals, seven in Norwegian peer-reviewed journals, and three book chapters in the past 5 years.

#### Grading: Fair

#### Societal impact

There is not much impact either on national or international level. In terms of patient care, the impact may well be high, but owing to the lack of generalisability of any findings, it will not be so in research terms.

#### Recommendation

Although the research institute has a research-driven view on all cases they have, they need to focus their research. In such a small set-up, they need to find an area that they can do very well. Cost-benefit analysis would give value to their research. Research strengths would be enhanced by tighter focus on particular areas of interest, for example, mental health of health care personnel and by closer collaboration with other groups in this field to enhance output.

## 5.14 National Institute of Occupational Health (NIOH)

#### Description of the department

The National Institute of Occupational Health (NIOH) started in 1947, but has since undergone several organizational changes, and now has the role as the national research institution in the field of work environment and occupational health. There are four departments performing research: Occupational medicine and epidemiology; Chemical and biological working environment; Musculoskeletal disorders; and Psychological and social factors at work. Only the research group Psychological and social factors at work is evaluated by Panel 6. Besides research, NIOH does, for example, work environment surveillance, outpatient clinics, teach, conduct occupational hygiene laboratory service analyses, and hosts the national work environment library. NIOH has 100 staff, the majority being technical/administrative personnel (71), but with a number of senior research scientists (19), and researchers (8). Altogether 18 PhD candidates are affiliated with the NIOH.

#### General comments and recommendations

The research effort of the Institute is spread across four departments, which are thus fairly small. Consideration might be given to forming alliances with other research institutions, including strengthening ties internationally, as a means of leveraging and strengthening the Institute's research resources.

#### 5.14.1.1 Psychological and Social Factors at Work

#### Description of the Unit

The study of psychosocial and social factors at work is under development at the NIOH, and the department was formed by the reorganization of NIOH in 2006. Organizational psychology has elucidated factors that determine job motivation, job satisfaction, turnover intent, and related outcomes; the role of psychological and social exposures at work in producing pain; the psychophysiological mechanisms in modifying or maintaining pain. The unit is quite small, and primarily financed by internal funds. The review committee was given CVs for the director of another unit in close collaboration with the unit, one adjunct professor and one research scientist. There are three PhD candidates at the time of evaluation.

#### General comments

Strengths include a multidisciplinary staff and methods, and large and potentially fruitful datasets. However, much staff time in recent years has gone into collecting these datasets, and it is recognised that there is now a need to emphasise analysis and publications from the data. The research topics covered are limited compared to the potential scope; the small resources have made it difficult to move into emerging topics. The unit does have some national collaboration, but only limited international collaboration, and there is no tradition of foreign study visits by doctoral students. Scientific quality

The 33 international peer-reviewed articles, one Norwegian peer-reviewed article and two book chapters in the publications record over the evaluation period, include some in high-impact journals. But, even considering the small staff, only half of whose time is devoted to research, the pace of publication needs to be increased.

#### Grading: Good

#### Societal impact

The unit is working on issues of importance in the Norwegian workplace. Norwegian government ministries have regularly made use of unit staff and findings in policymaking.

#### Recommendation

The panel encourages the unit, despite the difficulties, to consider moving into the area of evaluating the impact of workplace interventions. The small size of the unit puts it at some strategic risk. A substantial program of research in the unit's area will require greater resources. The unit would benefit from wider interchange with international counterparts than is evident in the current self-evaluation.

### **5.15 Norwegian Institute of Public Health**

The Norwegian Institute of Public Health is a governmental institution, established in 2002, and located in Oslo and Bergen. There are five scientific divisions: Environmental medicine, Epidemiology, Forensic toxicology and drug abuse research, Infectious disease control, and Mental health. The institute is responsible for 10 mandatory national health registries, but also for large population based databases, including some biobanks. The leadership is straightforward, with a director general and five division directors, who have a strategic role as well as being directly involved in research. The general aim of the research is to develop knowledge for disease prevention and health promotion. The institute is large, with a staff of about 1000. Of them, 188 are researchers with a doctoral degree, the majority ( $\approx 60\%$ ) of them being between 40 and 60 years of age. The staff is multidisciplinary and has an even gender distribution.

#### General comments and recommendations

The national health registries and large population based cohorts is a major strength of the institute. Internationally, such registries rarely exist. The institute has the staff and data resources to make major contributions to knowledge in the field internationally, as well as fulfilling its important national role. The institute has an unprejudiced policy of hiring the best available statisticians nationally and even internationally. This poses challenges because state salaries do not compare favourably in labour market.

#### 5.15.1 Mental health

#### Description of the Unit

The Division of Mental Health (DMH) was separated from the Institute's Division of epidemiology in 2006, and presently has 98 staff, including 49 researchers, 28 of whose CVs were included in DMH's self evaluation. Fifty-five percent of the staff have full time positions, 21% have 50-80% part-time positions and 22% have 10-20% positions. The staff includes 33 PhD candidates and 11 postdoctoral fellows.

DMH is organized in five departments: Adult mental health; Child and adolescent mental health, Health surveillance and prevention; Psychosomatics and health behaviour; and Suicide research and prevention. The research emphasis is on analytic epidemiology, primarily using four large longitudinal datasets: the large Norwegian Mother and Child Cohort study; a study of a regional population, the Nord-Trøndelag Health Study; a population-based twin study of mental health, and a family study of mental and behavioural problems in childhood and adolescence. The unit conducts research on most of the major groups of mental disorders, including anxiety and depression, eating disorders, personality disorders, neurodevelopmental disorders and disorders associated with somatic conditions. In addition, they study hearing loss, suicide, and quality of life. The research is restricted to risk factors, protective factors, causes and consequences of mental disorders, and excludes healthcare services or treatment research. The division is also moving into intervention studies.

#### General comments

Although the Division of mental health is relatively new, it has impressive datasets as a core strength, which have been developed over a considerable period. Its financial

situation is good; in addition to core resources, the division has received generous grant money. There is a clear strategy of prioritizing research areas in which Norway has a comparative advantage, notably longitudinal population studies drawing both on registers and on surveys. The division's move into intervention studies was welcomed. There is a good record of collaborative work with other research groups, both nationally and internationally, including a commitment to career development of younger researchers through international study placements. There is a clear recognition of the division's strengths and weaknesses. However, one attribute listed as a weakness, a low ratio of senior to junior researchers, can also be regarded as promising for the future.

#### Scientific quality

The unit has published 307 articles in peer-reviewed journals, 15 Norwegian publications and four book chapters in the past 5 years. Many of them are published in well-regarded international journals (e.g., Am J Psychiat; J Pers Soc Psychol; Psychol Sci; Ann Neurol).

#### Grading: Very Good to Excellent

#### Societal impact

The division's studies of prevalence, risk, protection, causes, and societal consequences of mental disorders are important to society in order to improve public mental health. The research has influenced governmental policy in several ways, including changed priority setting (e.g. more attention to prevention, early intervention, immigrant mental health, social inequality, and suicide prevention). The state budget text from the government to the parliament now includes data from the division and descriptions drawing on the division's work of the prevalence, risk and protection factors for, causes of, and societal consequences of mental distress and mental disorders. The division's findings have influenced policy in terms of changing priorities.

#### Recommendation

The excellent databases are regarded as a strength of the program, but as is recognized, redoubled efforts are needed to publish from them. The move into intervention evaluations is regarded as an interesting extension of the division's research program. The move to increase postdoctoral fellows is seen as a good strategy for strengthening the staff. Exchange programs for PhD candidates and postdoctoral fellows could be further developed. The recognized need for strengthened statistical expertise could perhaps be met by collaborations with mathematics or statistics departments. New efforts to secure EU funding are suggested. The panel is of the opinion that the Division of mental health has a great opportunity to become excellent.

Evaluation of biology, medicine and health research in Norway (2011)

### **Appendix. A Mandate**

## Evaluation of research in biology, medicine and health in Norway 2010 – 2011

#### Mandate for the evaluation

The Research Council of Norway (RCN) is given the task by the Ministry of Education and Research to perform subject-specific evaluations. The Division for Science has decided to evaluate research activities in biology, medicine and health and psychology in Norwegian universities, university hospitals, relevant research institutes and relevant university colleges.

Evaluations have previously been performed within these subjects/fields, in biology in 2000 and medicine and health in 2003.

#### 1. The objective of the evaluation

The main focus of the evaluation should be the scientific quality of Norwegian research within biology, medicine and health and psychology in Norwegian universities, university hospitals, relevant research institutes and relevant university colleges.

The evaluation will reinforce the role of the RCN as advisor to the Norwegian Government and relevant ministries. The evaluation will give knowledge, advice and recommendations on biological, medical and health related research and give the institutions as well as the RCN and relevant ministries a better basis for determining future priorities within and between fields of research.

Specifically, the evaluation will:

- provide a critical review of the strengths and weaknesses of the above fields, both nationally and at the level of individual research groups and academic departments. The scientific quality of the research will be reviewed in an international context.
- assess to what degree the previous evaluations have been used by the institutions in their strategic planning
- discuss to what degree the research units perform research in accordance with the strategy of their institution
- identify the research units which have achieved a high international level in their research, or have the potential to reach such a level
- identify areas of research that need to be strengthened in order to ensure that Norway in the future possesses necessary competence in areas of national importance. A key aspect is to enable the RCN to assess the situation regarding recruitment within the scientific fields
- discuss to what extent the research meets the demand for interdisciplinary research and future societal challenges.

#### 2. Organization and methods

International evaluation panels will be appointed for the following fields:

-Botany-, zoology- and ecology- related disciplines

-Physiology related disciplines including corresponding translational research

-Molecular biology, including corresponding translational research

-Clinical research, including corresponding translational research (two panels)

-Public health and health-related research

-Psychology and Psychiatry

Self-assessments including information about the organization and resources, as well as future plans, will be provided by the research units. In addition the panels will be provided with bibliometric analysis. Representatives from the involved units will be invited to meet the panels for presentations and discussions.

Each of the evaluation panels will write a report with evaluations of the different research units as well as specific recommendations. These reports will be sent to the research units for factual control. In order to provide general recommendations at a national level for research within these fields, Joint Committees will be established comprising members from each of the different evaluation panels/research areas.

Specific criteria for inclusion and exclusion - see attachment.

#### 3. Tasks of the evaluation panels

The panels are requested to

Evaluate research activities with respect to scientific quality, national and international collaboration. Scientific quality should be the main focus

Evaluate how the research is organized and managed.

Submit a report with specific recommendations for the future development of research within biology/medicine/health/psychology in Norway, including means of improvement when required.

Aspects to be assessed in the panel reports:

#### 3.1 National level

Strengths and weaknesses Research cooperation nationally and internationally Recruitment and mobility General resource situation regarding funding and infrastructure Cooperation with other sectors of society (e.g. industry)

#### 3.2 Institutional level

To be defined as the institution as such, or as a university department, or a research institute.

Depending on the size of the institution level 3.2. and level 3.3. may be merged. In case of two levels, level 3.2 focus on organisation and strategy, level 3.3. on research quality and production.

Organisation, research leadership and strategy

Including follow up of recommendations given in previous evaluation/s Resource situation

Funding, staffing, infrastructure and the balance between resources and research activities

Scientific quality

Including the description of a publication strategy

Training, mobility and career path

Recruitment and policies for recruitment

Policy for mobility and career path

Policy for gender and age balance in academic positions

#### Research collaboration

Collaboration and networking activities at national and international level including interdisciplinary and multidisciplinary research activities, as well as translational research (from basic to applied research or vice-versa)

#### 3.3 Research units

Organisation, research leadership and strategy

Including resource situation (staff and funding) and research infrastructure Research activities

Scientific quality and production

Training, mobility and career path

Recruitment and policies for recruitment

Policy for mobility and career path

Gender and age balance in academic positions

#### Research collaboration

Collaboration and networking activities at national and international level including interdisciplinary and multidisciplinary research activities, as well as translational research (from basic to applied research or vice-versa)

#### 4. Time schedule

Panel meetings will take place in Oslo March-June 2011 Deadline for submitting draft panel reports August 2011 Deadline for submitting final reports October 2011 Deadline for joint reports November 2011

#### 5. Miscellaneous

Other important aspects of Norwegian biological, medical and health related research that ought to be given consideration.

#### Attachments

#### **Delimitation and organisation**

The panels are asked to base their evaluation on self-assessments from the research units, factual information, bibliometric analysis and hearing meetings.

Starting point for the present evaluation will be the research performed at the institutions in question. The university departments and several institutes in the institute sector are too large to be evaluated as one single research unit. In order to give an overview of the research the evaluation will be carried out as follows:

### Departments at the universities and university colleges and institutes in the institute sector (named institution)

- 1. The institution level 1 describes its organisation and research strategy in a written document as well as factual information including funding, number of permanent and preliminary positions etc.
- 2. The level below the institutions (section, group, program etc.) is the unit that will be evaluated and which prepare the self-assessment for the research level 2.

In some institutions the level 2 units might be placed in different panels. If so the institute structure and strategy will present their activities to all relevant panels. Large evaluations units within level 2 belonging to different panels may split in different evaluation units or will be evaluated in a panel covering the main content of their research.

The units to be evaluated at level 2 need to be units already established. However it is important that the evaluation units to be evaluated have a certain minimum size. If the research performed within two or more evaluation units belong together thematically, it may be an advantage to prepare a joint self-assessment making it clear that the self-assessment describes the research in two or more groups. Level 2 units with minor scientific activities and production, are to be described on level 1, the general description of the institute.

#### Research at the university hospitals

The research performed in the university hospitals is often part in integrated research units between the university and the hospital. It will normally neither be practical, nor natural to separate the self-assessment from these units. It is preferable that these integrated units give a joint self-assessment and a joint oral presentation at the hearing meetings. The universities are asked to take the main responsibility for the selfassessment when the research unit is led by a researcher who has his/her main position at the university. The same is asked from the university hospital when the research unit is led by a researcher who has his/her main position at the hospital.

### Appendix. B Criteria for grading

#### Criteria for grading

Excellent	Research at the international front position: undertaking original research of international interest, publishing in internationally leading journals. High productivity.
Very good	Research with high degree of originality, but nonetheless falls short of the highest standards of excellence. A publication profile with a high degree of publications in internationally leading journals. High productivity and very relevant to international research within its sub-field.
Good	Research at a good international level with publications in internationally and nationally recognized journals. Research of relevance both to national and international research development.
Fair	Research that only partly meets good international standard, international publication profile is modest. Mainly national publications. Limited contribution to research
Weak	Research of insufficient quality and the publication profile is meagre: few international publications. No original research and little relevance to national problems.

### **Appendix. C Letter to Institutions**



Se vedlagte adresseliste

Vår saksbehandler/tlf. Berit Nygaard, +47 22037174 Vår ref. 201002437 Oslo, 21. juni 2010

#### Fagevaluering av biologi, medisin og helsefag, inklusive psykologi invitasjon til informasjonsmøte og invitasjon til å plassere forskningsenhetene i evalueringspaneler

Det vises til tidligere informasjon om fagevalueringen i brev av 25.2.2010, samt våre nettsider om evalueringen; www.forskningsradet.no/biomedhelseevaluering

#### *Informasjonsmøte*

Vi inviterer til informasjonsmøte på Gardermoen, Radisson Blu Airport Hotel tirsdag 24. august kl 10.30 – 15.00

Informasjonsmøtet er primært for representanter for ledelsen ved involverte fakulteter og institutter i UoH-sektoren og instituttsektoren.

Hensikten med møtet er å informere om evalueringen med fokus på organiseringen, mandatet for evalueringspanelene, egenvurderingene og faktainformasjon, tidsplan med mer. Program for møtet og lenke til påmelding legges på www.forskningsradet.no/biomedhelseevaluering i løpet av uke 26. Påmeldingsfrist er mandag 16. august, og det er mulig å melde seg på allerede nå https://web.guestback.com/norgesforskningsrd/kyl3fa8ebo/. På våre nettsider vil vi i uke 32 legge utkast til faktaark og mal for egenvurdering. Kommentarer til disse dokumentene kan gis på informasjonsmøtet.

#### Dialog og tilbakemelding

Vi inviterer med dette institusjon/institutt til å plassere sine evalueringsenheter i de ulike panelene, se definisjon i vedlegg 3, Avgrensning og organisering. For å være sikre på at vi har etablert hensiktsmessige paneler og at vi får en noenlunde jevn fordeling av evalueringsenheter i panelene, ber vi om en tilbakemelding fra alle institusjoner/institutter med forslag til plassering av evalueringsenhetene for den enkelte institusjon/institutt så snart som mulig og senest fredag 27. august. Tilbakemelding til evalbiohelse@forskningsradet.no. Ta gjerne kontakt underveis ved behov.

Vi ber også om å få oppgitt en kontaktperson ved hver institusjon/institutt. Det vil blant annet være behov for dialog i etterkant av fristen slik at sammenlignbare forskningsfelt ved de forskjellige institusjonene, så langt mulig, plasseres i samme panel.

#### Panelinndeling

Det planlegges en inndeling i syv paneler (se vedlegg 4). Panelinndelingen er basert på Norsk inndeling av vitenskapsdisipliner (vedtatt av Universitets- og høgskolerådet i 1994) for klassifisering av forskning. I arbeidet med å rekruttere eksperter til fagpanelene er følgende kriterier lagt til grunn:

-Det enkelte panel skal dekke disiplinene innenfor panelet

-Det tilstrebes å finne eksperter med bred kompetanse som kan dekke flere områder -Det vurderes om det er mulig å få med ett medlem i hvert panel som deltok i forrige evaluering for å bidra til kontinuitet

-Det tilstrebes at hvert panel har minst 40 % av begge kjønn

-Det tilstrebes en viss spredning i alder blant medlemmene

Det er lagt strenge habilitetsregler til grunn ved utnevning av panelmedlemmene.

#### Mandat for evalueringen

Mandatet for evalueringen følger vedlagt, vedlegg 3.

#### Utvidet tidsramme

Det har tidligere vært gitt tentativ tidsramme for evalueringen. Tidsrammen har nå blitt noe utvidet. Dette medfører at høringsmøtene blir forskjøvet til perioden 20. mars -10. juni, kun ukene uten helligdager. Den utvidede tidsrammen gir noe mer tid til dialog med miljøene og arbeidet med egenvurderingen, samt bedre tid til ferdigstillelse av rapportene. Evalueringen vil være avsluttet i løpet av 2011. Se tidsplanen i vedlegg 5.

#### Avgrensning og organisering

Hovedfokuset i evalueringen skal være vitenskapelig kvalitet i forskningen. Evalueringen er på gruppenivå, ikke enkeltforskernivå. Evalueringen vil bli gjennomført av fagfeller i paneler sammensatt av meritterte utenlandske forskere ("peer review") og alt materialet i evalueringen skal være på engelsk.

Evalueringen omfatter mange ulike institusjoner og antallet forskere er stort. Forskningsrådet har satt en grense for minstestørrelse for institusjon/institutt som inviteres til å delta i evalueringen. Det angitte antallet vitenskapelig ansatte gjelder innenfor hvert fagområde, dvs. innenfor biologi eller medisin og helsefag. Noen forskergrupper/forskere har deltatt i nylig gjennomførte fagevalueringer, disse skal ikke evalueres på nytt.

#### Kontaktpersoner i Forskningsrådet

Spørsmål i tilknytning til evalueringen kan rettes til:

- Prosjektleder Berit Nygaard, telefon 22037174, <u>bn@forskningsradet.no</u>
- Prosessleder Malena Bakkevold, telefon 95750533, post@malena.no

Hvert av panelene har en egen fagrådgiver, se vedlegg 4 med oversikten over panelene.

#### Parallelle evalueringer som berører flere av forskningsmiljøene

Formålet med fagevalueringer er å foreta en kritisk gjennomgang av forskningen med hensyn til kvalitet relatert til internasjonalt nivå, styrker og svakheter, rammebetingelser for forskningen og rekrutteringssituasjonen. I tillegg innhentes råd om hva som skal til for å styrke forskningen og hvilke prioriteringer som peker seg ut. De to første evalueringene nevnt nedenfor evaluerer spesielle satsinger i Forskningsrådets regi og overlapper bare delvis med fagevalueringen.

#### Evaluering av FUGE

Det er en pågående evaluering av FUGE (funksjonell genomforskning) for å se på merverdien av programmet, og bla å få innspill til det videre arbeidet med satsing på bioteknologi.

#### Midveisevaluering av SFF-II

Formålet med evalueringen er å bedømme de vitenskapelige resultatene sentrene har oppnådd og å gi en vurdering av planene sentrene har utarbeidet for forskningen i siste 5årsperiode.

Evalueringen finner sted i 2010 – 2011.

#### Midtveisevaluering av SFI

Evalueringen skal vurdere de forskningsresultater som er oppnådd og om virksomheten i senteret underbygger senterets mål. Evalueringen skal videre gi en vurdering av planene for virksomheten i den mulige siste 3-årsperioden. Evalueringen gjennomføres høsten 2010.

#### Evaluering av idrettsvitenskap (sports sciences)

Parallelt med fagevalueringen vil det bli gjennomført en felles nordisk evaluering av idrettsvitenskap 2010-2011. Evalueringen blir administrativt ledet av Finlands Akademi. Forskningsrådet ønsker at relevante norske miljøer skal delta i denne evalueringen, og vi vil sende ut separat informasjon om dette. Finlands Akademi avholder et informasjonsseminar om evalueringen 17. august, kl 12.00 – 15.30 i Helsinki.

#### Evaluering av deler av instituttsektoren

Fiskeri- og kystdepartementet (FKD) og Landbruks- og matdepartementet (LMD) har initiert evalueringer av deler av sin instituttsektor – se vedlegg 1

Med vennlig hilsen Norges forskningsråd

Hilde Jerkø (sign.) Avdelingsdirektør Divisjon for vitenskap Mari Nes (sign.) Avdelingsdirektør Divisjon for vitenskap

#### Vedlegg 1

Institusjonene som omfattes av fagevalueringen

#### Universitetene

Alle instituttene ved de medisinske fakultetene omfattes av evalueringen. Når det gjelder biologi og psykologi (bortsett fra ved UiB og UiT) vil evalueringen omfatte institutter og naturvitenskapelige museer som er deler av naturvitenskapelige og samfunnsvitenskapelige fakulteter.

#### Helseforetakene

Alle helseforetakene med universitetsfunksjon omfattes av evalueringen. I tillegg kommer Diakonhjemmet. For integrerte forskergrupper mellom universitetsinstitutter og helseforetak se vedlegg 2 Avgrensing og organisering. Når det gjelder øvrige helseforetak ber vi om at de regionale helseforetakene vurderer om det er andre helseforetak som faller innenfor rammene for evalueringen. Vi vil gjerne ha en dialog om disse med de regionale helseforetakene.

#### Instituttsektoren

For instituttsektoren generelt kan det ved enkelte institutter være at nivå 1 og nivå 2 er sammenfallende – se vedlegg 2 Avgrensning og organisering.

Forskningsrådet er kjent med at Fiskeri- og kystdepartementet (FKD) parallelt med fagevalueringen vil evaluere Havforskningsinstituttet. Havforskningsinstituttet ønsker å være en del av fagevalueringen og FKD ønsker å benytte seg av det innsamlede materialet som delinnspill til sin evaluering og i tillegg benytte panelets delrapport om instituttet fra fagevalueringen.

Landbruks- og matdepartementet (LMD) har bedt Forskningsrådet om å evaluere bla Bioforsk, Norsk institutt for skog og landskap og Veterinærinstituttet i løpet av 2010. Rapporten for denne evalueringen skal være ferdig 1. desember 2010 for å kunne være en del av grunnlaget for en ny melding til Stortinget om landbruks- og matpolitikken. Disse tre instituttene inviteres også til å delta i fagevalueringen av biologi, medisin og helsefag. Som vi skrev i vårt brev i februar er skillet mellom grunnleggende og anvendt forskning nå mindre fremtredende og det er økt samarbeid på tvers av forskningsart både innenfor biologiske fag og medisin og helsefag. Det er derfor ønskelig å evaluere hele forskningsfeltet innenfor de ulike fagområdene og institusjonene samtidig. Forskningsrådet ser det som viktig at også instituttsektoren deltar i denne brede fagevalueringen. Vi regner med at det materialet som ferdigstilles til evaluering av vitenskapelig kvalitet i LMD's evaluering vil kunne være et viktig grunnlag for materialet til fagevalueringen.

#### Høyskolene

Som i instituttsektoren kan det være at ved enkelte høyskoler er nivå 1 og nivå 2 sammenfallende.

#### Vedlegg 2

Avgrensning og organisering

Panelene skal basere sin evaluering på egenvurdering fra forskningsmiljøene, faktainformasjon, bibliometrisk analyse og møter med forskningsmiljøene.

Evalueringen vil ta utgangspunkt i instituttene og den forskningen som foregår der. Universitetsinstituttene og flere institutter i instituttsektoren er imidlertid for store og sammensatte enheter til at instituttet kan være evalueringsenheten. For at evalueringen skal gi oversikt over forskningen i faget gjennomføres evalueringen etter følgende modell:

Institutter i UoH-sektoren og instituttsektoren

- 1. Instituttet beskriver organisering og strategi for forskningen ved instituttet og gir faktainformasjon (finansiering, antall ansatte og stipendiater med mer) (nivå 1)
- 2. Nivået under instituttet (instituttgruppe, avdeling m.m.) er den enheten som evalueres og disse lager egenvurdering for forskningen (nivå 2)

Nivå 2 har ulike benevnelser ved de forskjellige institusjonene (instituttgrupper, seksjon, avdeling, forskergruppe, tematiske program m.m.). Ved enkelte institutter vil det være slik at enheter på nivå 2 hører hjemme i forskjellige paneler. I de tilfellene vil instituttbeskrivelsen følge til alle panelene. Robuste/store undergrupper på nivået under nivå 2 som kan høre hjemme i forskjellige paneler, plasseres der hvor hovedtyngden av forskningen hører hjemme (mestprinsippet).

Enhetene som skal evalueres på nivå 2 skal være etablerte enheter, ikke konstruerte grupper for denne evalueringen. Det er viktig at enhetene ikke er for små. Dersom instituttene ser at forskningen i forskergrupper/evalueringsenheter tematisk hører sammen, kan det være en fordel at disse forskergruppene lager en samlet egenvurdering hvor det framgår at det er en fremstilling av forskningen i flere grupper. Evalueringsenheter/forskergrupper på nivå 2 som har liten vitenskapelig aktivitet og produksjon, beskrives i instituttets (nivå 1) generelle omtale i egenvurderingen.

Minstestørrelse på institusjon/institutt som inviteres til å delta i evalueringen er:

UoH-sektoren, inklusive helseforetak med universitetsklinikkfunksjon

1) Minst 5 vitenskapelig ansatte (professor I, førsteamanuensis I) innenfor hvert fagområde (biologi, medisin og helsefag) eller

2) Minst 5 fast ansatte forskere/klinikere med doktorgradskompetanse som har 40 % eller mer av sin stilling definert som forskning

Andre helseforetak

Minst 5 fast ansatte forskere/klinikere med doktorgradskompetanse som har 40 % eller mer av sin stilling definert som forskning

Instituttsektoren

Minst 5 fast ansatte forskere med doktorgradskompetanse som har 40 % eller mer av sin stilling definert som forskning innenfor hvert fagområde (biologi, medisin og helsefag).

#### Forskning ved universitetssykehusene

Ved universitetssykehusene er det i svært stor grad integrerte forskergrupper/enheter mellom universitetsinstituttene og helseforetaket. Det vil normalt verken være hensiktsmessig eller naturlig å skille egenvurderingen og presentasjonen av disse enhetene. Det er ønskelig at integrerte enheter mellom universitet og helseforetak gir en felles egenvurdering og en felles presentasjon.

Vi ber om at universitetet tar hovedansvar for egenvurdering og eventuell presentasjon når forskergruppen/enheten ledes av en som har hovedstilling ved universitetet, mens helseforetaket tar hovedansvar for egenvurdering og eventuell presentasjonen når enheten ledes av en som har hovedstilling eller hele stillingen ved helseforetaket.

Kriterier for eksklusjon

- Nylig evaluert i annen fagevaluering (eks sosiologi, økonomi, farmasi, kjemi, fysikk, geofag)
- Idrettsmedisinske fag tas ikke med i denne evalueringen fordi en felles nordisk evaluering av idrettsvitenskap (sports sciences) vil bli gjennomført i 2010-2011.
- Sosialfaglig forskning (barnevern, sosialtjenester) inkluderes ikke i evalueringen.

# Appendix. D Time Schedule for hearing meetings

Evaluation of Norwegian research in biology, medicine and health care – panel 6: Psychology and Psychiatry

Time schedule for the hearing meetings in Oslo 21.03.2011 – 25.03.2011

Date	Time	Institution/department	Unit
Mon	0830-0930	Panel Meeting	
Mar 21	0930-0945	Break	
2011	0945-1145	Norwegian Institute of Public	1.Mental health
		Health	
	1145-1200	Panel Meeting	
	1200-1300	Lunch	
		University of Oslo (UiO), Faculty	
		of Social Sciences	
	1300-1545	Department of Psychology	1.Clinical and personality
			psychology
			2.Cognitive neuroscience
			3.Social, cultural and health
			psychology
			4.Developmental psychology
			5.Work and organizational
			psychology
	1545-1600	Break	
	1600-1630	Panel Meeting	
	1630-1700	National Institute of Occupational	1.Psychological and Social
		Health	factors at Work
	1700-1800	Panel Meeting	

Radisson Blu Scandinavia Hotel, Holbergsgt. 30, Oslo

Date	Time	Institution/department	Unit
Tue	0830 - 0900	Panel Meeting	
Mar 22	0900 - 0945	Modum Bad Psychiatric Hospital	1.Research Institute
2011	0945-1000	Break	
		University of Bergen (UiB),	
		Faculty of psychology	
	1000-1100	Department of Psychosocial	1.Bergen Judgement and
		Science	Decision Making and social
			Cognition
			2.Bergen Laboratory for the
			Study of Decision, Intuition,
			Consciousness and Emotion
			3.Bergen Bullying Research
			Group
			4. Society and Workplace
			Diversity Research Group 5.Social Norms and Interaction
			6. The Operational Psychology
			Research Group
	1100-1115	Break	
	1115-1200	Department of Clinical Psychology	1 Performance anxiety research
	1115-1200	Department of Chinear T Sychology	and qualitative clinical studies
			2.Group for qualitative research
			on mental health
			3. The Bergen Relational Theory
			and Psychotherapy research
			Group
			3. Trauma Psychology research
			Group
			4. The Bergen Group for
	1000 1015	<b>x</b> 1	Treatment Research.
	1200-1315	Lunch	
	1315-1415	Department of Biological and	1.Bergen Cognition and
		Medical Psychology	Learning Group
			2.Bergen fMRI-group 3.Research Group on
			Experimental and Clinical
			Stress.
	1415-1430	Break	
		The University of Tromsø (UiT),	
		Faculty of Health Sciences	
	1430-1545	Department of Psychology	1.Research group in affective
			and cognitive neuroscience
			2.Research group in clinical
			psychology and mentale-health
			3.Research group in cognitive

		psychology 4.Research group in health and social psychology
1545-1600	Break	
1600-1700	Department of Clinical Medicine	1.Psychiatric Research Group 2.The Regional Center for Child and Adolescent Mental Health
1700-1800	Panel Meeting	

Date	Time	Institution/department	Unit
Wed	0830 -0900	Panel Meeting	
Mar 23 2011		South Eastern Regional Health Authority	
	0900- 1015	Centre for Child and Adolescent Mental Health	1.Research Department 2.National Network for Infant Mental Health
	1015 -1030	Break	
		Uni Research	
	1030-1130	UNI Health	Centre for Child and Adolescent Mental Health
	1130-1230	Lunch	
		Norwegian University of Science and Technology (NTNU), Faculty of Social Sciences and Technology Management	
	1230-1415	Department of Psychology	1.Evolutionary psychology and fundamental psychological issues Research group 2.Cognitive, Biological and Neuroscience Research Group 3.Health-, organizational- and communication psychology Research group 4.Human Development, Learning and Skill Development research Group 5.Risk Psychology, Environment and Safety Research group 6.Clinical adult psychology and ADHD in adult, personality, forensic psychology and health psychology Research Group
	1415-1445	Break	
		Norwegian University of Science and Technology (NTNU), Faculty of Medicine and St. Olavs Hospital, Trondheim University Hospital	
	1445-1630	Department of Neuroscience	1.Adult Psychiatry 2.The regional Centre for Child and Adolescent Mental Health
	1630-1645	Break	
	1645-1800	Panel Meeting	

Date	Time	Institution/department	Unit
Thu	0900-0945	Panel Meeting	
Mar 24	0945-1000	Break	
2011			
		University of Oslo, Faculty of	
		Medicine, Institute of Clinical	
		Medicine, Oslo University Hospital	
	1000-1215	Division of Mental Health and	1.Personality Psychiatry research
		Addiction	2.Norwegian Centre for
			Addiction Research
			3. Traumatic Stress Research
			4.Child and Adolescent
			Psychiatry Research
			5.Psychosis Research Centre
			6.Forensic Psychiatry Research
			7.Psychotherapy Research
	1215-1330	Lunch	
		University of Oslo, Faculty of	
		Medicine	
	1330-1415	Institute of Basic Medical Sciences	1.Behavioural Sciences
	1415-1430	Break	
	1430-1500	Panel Meeting	
	1500-1630	Meeting with postdoctoral fellows	
	1630-1730	Panel Meeting	

Date	Time	Institution/department	Unit
Fri		University of Oslo, Faculty of	
Mar 25		Medicine, Institute of Clinical	
2011		Medicine, Oslo University	
		Hospital	
	0830-0915		Neuropsychiatry and
		Neuroscience	psychosomatic medicine
	0915-0930	Panel Meeting	
		UiO, Faculty of Medicine, Institute	
		of Clinical Medicine, Akershus	
		University Hospital	
	0930-1015	Institute of Clinical Medicine,	1.Clinical and Mental Health
		Akershus University Hospital	Services Research
	1015-1030	Break	
		University of Bergen, Faculty of	
		Medicine and Dentistry and Helse	
		Bergen HF, Haukeland University	
		Hospital	
	1030-1130	Department of Clinical Medicine	1.Section for Psychiatry
		and Haukeland University Hospital	<b>e</b> 1
			for Sleep Disorders
	1130-1230	Lunch	
	1230-1330	Stavanger University Hospital	The Psychiatry Research Group
	1330-1600	Panel Meeting	

## **Appendix. E Overview of all panels**

Overview of all panels

Panel 1Botany, Zoology and Ecology-related Disciplines: Evolutionary biology,<br/>ethology, marine biology, limnology, plant physiology, systematics and agricultural<br/>sciences

**Panel 2** Physiology-related Disciplines (human and zoophysiology), including corresponding translational research: Anatomy, physiology, neurobiology, toxicology, pharmacology, embryology, nutritional physiology, pathology, basic odontological research, veterinary medicine, fish health

Panel 3Molecular Biology, including corresponding translational research.Microbiology, immunology, cell biology, biochemistry, molecular biology, genetics,<br/>genomics, biotechnology including breeding and bioinformatics

**Panel 4a** Clinical Research, including corresponding translational research: All surgery, anaesthesiology, oncology, physical medicine and rehabilitation, gynaecology, paediatrics, dermatology and venereology, ophthalmology, otolaryngology and all clinical odontology

**Panel 4b** Clinical Research, including corresponding translational research: All internal medicine (cardiology, nephrology/urology, gastroenterology, endocrinology, haematology, infectious diseases, respiratory tract diseases, geriatric medicine), neurology, rheumatology, radiology and medical imaging and other clinical medical disciplines

**Panel 5** Public Health and Health-related Research: Public health, community dentistry and community nutrition. Epidemiology and medical statistics. Health services research, preventive medicine, nursing research, physiotherapy, occupational medicine, behavioural research and ethics, other health-related research

**Panel 6** Psychology and Psychiatry: Clinical psychology, social-, community- and workplace psychology, organizational psychology, personality psychology, developmental psychology, cognitive psychology, biological psychology and forensic psychology. Psychiatry, including geriatric psychiatry, child and adolescent psychiatry, biological psychiatry, and forensic psychiatry. Behaviour research

## **Appendix. F Overview of panel members**

#### Panel 6: Psychology and Psychiatry

Professor Agneta Herlitz, panelleader Aging Research Center Karolinska Institutet Sweden

Professor Pekka Niemi Department of Psychology Turku University Finland

Professor Amina Memon Royal Holloway University of London London UK

Professor Anita Thapar Child and Adolescent Psychiatry Cardiff University UK

Professor emeritus Robin Room University of Melbourne Australia

Professor Eve C Johnstone Department of Psychiatry University of Edinburgh UK

Professor José María Peiró Organizational Psychology University of Valencia Spain

Professor emeritus Lars Jacobsson Klinisk vetenskap Umeå University Sweden

PhD Sari Karlsson, secretary Aging Research Center Karolinska Institutet Sweden

## **Appendix. G CV`s for panel members**

Panel 6

#### Professor Agneta Herlitz

Degree(s):	1. PhD (1991),
	2. Licensed psychologist (1994)
	3. Associate professor (1997)
	4. Professor (2008)
Research field(s):	1. Cognitive aging
	2. Sex differences in cognition
Present position:	Professor of Psychology, Aging Research Center, Karolinska
	Institutet; Deputy Head of Department of Neurobiology, Care
	Sciences, and Society, Karolinska Institutet

#### **Professor Emeritus Lars Jacobsson**

Degree(s):	1. PhD psychiatry, Umeå University (1975)
	2. Specialist Psychiatry (1975)
Research field(s):	1. Social psychiatry (organization of care, suicidology,
	transcultural psychiatry, psychiatric epidemiology)
	2. Medical ethics
Present position:	Professor Emeritus (Professor of general psychiatry 1977-2009,
	Umeå University)

#### **Professor Eve C Johnstone**

Degree(s):	1. Bachelor of Medicine, Bachelor of Chirurgery MB, CHB (1967)
	2. Doctor of Medicine MD (1974)
	3. Fellow of the Royal College of Psychiatrists FRCPsych (1980)
	4. Fellow of the Royal College of Physicians FRCP (1981)
	5. Fellow of the Academy of Medical Sciences F.MedSci (1999)
	6. Fellow of the Royal Society of Edinburgh FRSE (2003)
Research field(s):	1. Schizophrenia and Related Psychoses
	2. Brain Imaging: Neurodevelopmental Disorders
Present position:	Assistant University Principal for Mental Health, Research &
	Development & Emeritus Professor of Psychiatry, The University
	of Edinburgh. A particular responsibility of her present post is the
	setting up of a new combined psychiatry and neuroscience centre at
	the University of Edinburgh concerning research into Fragile X
	syndrome, autism and learning disability.

#### **Professor Amina Memon**

Degree(s):	1. BSC Psychology
	2. PhD Psychology
Research field(s):	1. Eyewitness Memory
	2. Face Recognition
Present position:	Professor Psychology, Royal Holloway University of London

#### Professor Pekka Niemi

Degree(s):	1. PhD
	2. Docent of cognitive psychology
Research field(s):	1. Beginning reading and its difficulties
	2. Cross-language aspects of reading acquisition
Present position:	Professor of Psychology, University of Turku, Finland

#### Professor José Maria Peiró

Degree(s):	<ol> <li>PhD in Philosophy, University of Valencia (1977)</li> <li>Licenciatura in Philosophy, University of Valencia (1975)</li> <li>Licenciatura in Psychology, University Complutens</li> </ol>
	Madrid (1976)
Research field(s):	1. Occupational Stress
	2. Team work
	3. Organizational climate and culture
Present position:	Director of the Research Institute of Human Resources Psychology,
	Organizational Development and Quality of Working Life at the
	University of Valencia. Spain.

#### **Professor Robin Room**

Degree(s):	<ol> <li>B.A., English, Princeton University, (1960)</li> <li>M.A. English, University of California (1962)</li> <li>M.A., 1967, Sociology, University of California (1967)</li> </ol>
	4. Ph.D., 1978, Sociology, University of California (1978)
Research field(s):	1. Social epidemiology of alcohol and drugs
	2. Policy studies of alcohol, drugs, gambling
	3. Treatment systems and other societal responses to problematic
	behaviour
Present position:	1. Director, AER Centre for Alcohol Policy Research, Turning
	Point Alcohol & Drug Centre, Fitzroy, Victoria, Australia;
	Professor, School of Population Health, University of Melbourne;
	Professor, Centre for Social Research on Alcohol & Drugs
	(SoRAD), Stockholm University

Degree(s):	1. MB Bch (Medicine) University of Wales College of
8 ()	Medicine (1985)
	2. MRCPsych (1989)
	3. PhD University of Wales College of Medicine (1995)
	4. Fellow of the Royal College of Psychiatrists FRCPsych (2005)
	5. Fellow of the Academy of Medical Sciences F.MedSci (2011)
	6. FWLS (2011)
<b>Research field(s):</b>	1. Child and Adolescent Psychiatry
	2. Genetics
	3. ADHD
Present position:	Professor of Child and Adolescent Psychiatry, Department of
-	Psychological Medicine, School of Medicine, Cardiff University
	<ol> <li>Child and Adolescent Psychiatry</li> <li>Genetics</li> <li>ADHD</li> <li>Professor of Child and Adolescent Psychiatry, Department of</li> </ol>

Dr Sari Karlsson	
Degree(s):	1. Master of Social Sciences. Uppsala University (1999)
	2. Licentiate of Psychology, Uppsala University (2002)
	3. Doctor of Medical Sciences, Karolinska Institutet (2005)
Research field(s):	1. Cognitive Aging
	2. The role of dopamine in cognition
Present position:	Research scientist, Aging Research Center, Karolinska Institutet

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**The Research Council of Norway** P.O.Box 2700 St. Hanshaugen NO–0131 Oslo

Telephone: +47 22 03 70 00 Telefax: +47 22 03 70 01 post@forskningsradet.no www.forskningsradet.no

October 2011

ISBN 978-82-12-02999-6 (printed version) ISBN 978-82-12-03000-8 (pdf)

Design: Agendum Cover photoes: Colourbox, Shutterstock Print: 07 Gruppen AS