

CALAR Annual Report 2006

Status of 2006 and plans for 2007:

The year has been dominated by both professional and strategic activities. Due to the growth in size of the centre it has, among other things, been necessary to define a more formal framework for the activity of the centre. Furthermore, it has been possible to implement more complex and financially challenging projects. Consequently, the steering committee held a strategy meeting on the 20th June which has resulted in the creation of the document "Mission, vision og strategi" (Mission, vision and strategy).

Optimization of project management and financial situation has been secured by i.a. the document "Kvalitetssikring af projekter og ansøgninger" (Quality control of projects and applications), preparation of plans of activities and actions based on the approved budget and by the introduction of project management. The centre has applied for external funds from various councils and foundations. Applications for a total of 7,121,772 DKK have been submitted, and a total of 4,000,000 DKK has been granted over the next three years in the form of two PhD scholarships and a research project in collaboration with Center for Bioetik og Risikovurdering (Centre for Bioethics and Risk Assessment).

The centre has presented its research results in scientific journals, at scientific symposia and congresses and also at the annual CALAR symposium.

The international contacts of the centre have among others been to IBMC in Porto, Portugal <http://www.ibmcp.up.pt/> and to NC3Rs "National Center for 3 Rs" in London, UK <http://www.nc3rs.org.uk/>, and it is the intention to expand the contact to other European centres within the same field.

The centre has been contacted by CEU (Centre for Business and Training) in Kolding with regard to a possible membership. However, at present the steering committee does not wish to expand the group of participants, as it is considered important to consolidate the knowledge and expertise in the centre with the present partners.

The centre has initiated the following projects in the current year:

- The effects of individual housing of rats and mice
- The consequences on animal welfare and research results when using music in the animal facility
- Diabetes onset and incidence in female NOD mice
- Environmental enrichment and cognitive abilities in emotional behavioural tasks
- Marking of newborn mouse-pups

The centre has finished the following projects in the current year:

- Test of the efficiency of the Airshower
- Comparison between aspen bedding and corn cob for rodents
- Development of method for microbiological test
- [Novo-cage] Home-cage observations
- [Novo-cage] Preference-study
- [Novo-cage] Emotionality (Open-Field, Elevated Plus Maze and effects of amphetamine on behaviour)
- [Novo-cage] Learning and cognition (Water Maze, muscle strength and clinical chemistry)
- [Novo-cage] Telemetry

- [Novo-cage] Diabetes incidence in BB rats
- [Novo-cage] Breeding in the Novo-cage
- The impact of sound and noise on physiological and behavioural parameters in laboratory rodents
- Preferences for housing in a semi-contact environment in SD rats
- A house for a mouse: Preferences for red-coloured shelters in different strains of mice

The centre has published the following in the current year:

- **The effects of individual housing on mice and rats: a review**, Krohn, T.C., Sørensen, D.B., Ottesen, J.L., Hansen, A.K., *Animal Welfare*, 15, pp. 343-352
- **The impact of different blood sampling methods on laboratory rats under different types of anaesthesia**, Toft, M.F., Petersen, M.H., Dragsted, N., Hansen, A.K., *Laboratory Animals*, 40, pp. 261-274
- **Controlling allergens in animal rooms by using curtains**, Krohn, T.C., Itter, G., Fosse, R., Hansen, A.K., *Journal of the American Association for Laboratory Animal Science*, 45, pp. 51-53

The total impact factor for the current year: 2,552

The centre has participated in the following meetings and congresses in the current year:

- Scand-LAS in Ellsinore with 1 paper presentation (TK) and 1 poster (LFMi)
- Scanbur's 9th international seminar with 4 paper presentations (TK, DBS, AKH)
- Institute of Animal Technology (IAT) Congress 2006, Jersey, UK with 1 paper presentation (LFMi)
- 40th International ISAE Congress 2006, Bristol, UK, with 1 poster (DBS)

The centre's mini symposium in the current year:

The symposium was held on 8th September at KVL/Life. The following papers were presented:

- A general presentation: Animal welfare from an ethnologist's standpoint by Björn Forkman (KVL)
- Mouse houses: Preference to red mouse houses by Laura Rønnow and Marianne Ravn (KVL)
- Evaluation of the effectiveness of Airshowers for removal of allergens by Klaus Vognbjerg (Scanbur-BK A/S)
- The effect of enrichment by the use of the Scantainer-Novo Rat Cage system with regard to general considerations by Thomas C. Krohn (KVL)
- The effect of enrichment by the use of the Scantainer-Novo Rat Cage system with regard to various behaviour tests by Dorte Bratbo Sørensen (KVL)
- The development of diabetes in BB-rats that are stabled in the Scantainer-Novo Rat Cage system by Jan Lund Ottesen (Novo Nordisk A/S)
- The effect of enrichment by the use of the Scantainer-Novo Rat Cage system measured by telemetry on Sprague Dawley rats by Nils Dragsted (Novo Nordisk A/S)

134 participants had registered for the symposium, coffee and cake were served, and at the end of the symposium Scanbur A/S served a beer.

The centre's M.Sc. students in the current year:

- Laura Rønnow, veterinarian student, completed in September
- Marianne Ravn, veterinarian student, completed in September

The centre's contacts to other groups in the current year:

- Contact to NC3Rs by Mark Prescott
- Contact to IBMC by Anna Olsson

The Centre's financial situation in the current year:

In 2006 the centre had a total budget of 1,695,650 DKK.

On 1st March an application for a funding for the centre of 2,371,772 DKK over a period of three years was submitted to FTP (The Danish Council for Technology and Innovation). The application was rejected.

An application for an industrial research scholarship was submitted to VTU (Ministry of Science, Technology and Innovation), and a funding of 750,000 DKK over the next three years was granted. Scanbur will contribute with the remaining two thirds for the scholarship.

An application for a funding of 2,500,000 DKK over the next year was submitted to Det strategiske forskningsråd (The Danish Council for Strategic Research), Programme Commission on Food and Health, Animal Ethics and Alternatives Programme. The funding was granted, and is to be shared with Center for Bioetik og Risikovurdering (Centre for Bioethics and Risk Assessment).

In addition to the above, KVL has granted a PhD scholarship to CALAR of 1,500,000 DKK over three years.

Planning of 2007:**The centre's plan of activities for the coming year:**

- To initiate two PhD projects (Industrial research PhD at Scanbur with Majbritt and the lifestyle PhD at KU, Faculty of Life Sciences)
- To finish the current Novo-cage projects.
- To initiate the music project
- To initiate the emotionalization project
- To clear up and finish old projects

The centre's ongoing projects in the coming year:

- The impact of the intestinal flora on the expression and variation of an animal model
- The effects of individual housing of rats and mice
- The consequences on animal welfare and research results when using music in the animal facility
- Diabetes onset and incidence in female NOD mice
- Environmental enrichment and cognitive abilities in emotional behavioural tasks
- Marking of newborn mouse-pups

- The effects of training of pigs for housing in metabolism cages
- Positive Emotions: Anticipatory Behaviour – Measures and Enrichment
- The microbiological efficiency of the LAF cabin

The centre's expected publications in the coming year:

- 2-3 publications on the 'Novo-cage-project'
- 1 publication on 'Test of the efficiency of the Airshower'
- 1 publication on 'Comparison between aspen bedding and CornCob for rodents'
- 1 publication on 'Quality of plasma sampled by different methods for multiple blood sampling in mice'
- 1 publication on 'A house for a mouse: Preferences for red-coloured shelters in different strains of mice'
- 1 publication on 'The impact of sound and noise on physiological and behavioural parameters in laboratory rodents'

The centre's expected participation in congresses/meetings in the coming year:

- FELASA (<http://www.felasa-iclas2007.com/>)
- ECOPA
- 6th World Congress on Alternatives & Animal use in the life sciences (<http://www.knt.co.jp/ec/2007/wc6/csaid.html>)
- Promemoria
- Scand-LAS (<http://www.scandlas.org/>)

The centre's budget in the coming year:

In 2007 the centre has a total budget of 3,118,000 DKK.

It is expected that applications will be submitted to the following foundations and councils:

- 2 to FTP
- 1 to Novo Nordisk Foundation and/or LEO Pharma Foundation