

The Danish 3R-Center

- and the National Committee

What we have done since last...



**ANIMAL PROTECTION
DENMARK**



Ministry of Environment
and Food of Denmark



Lundbeck



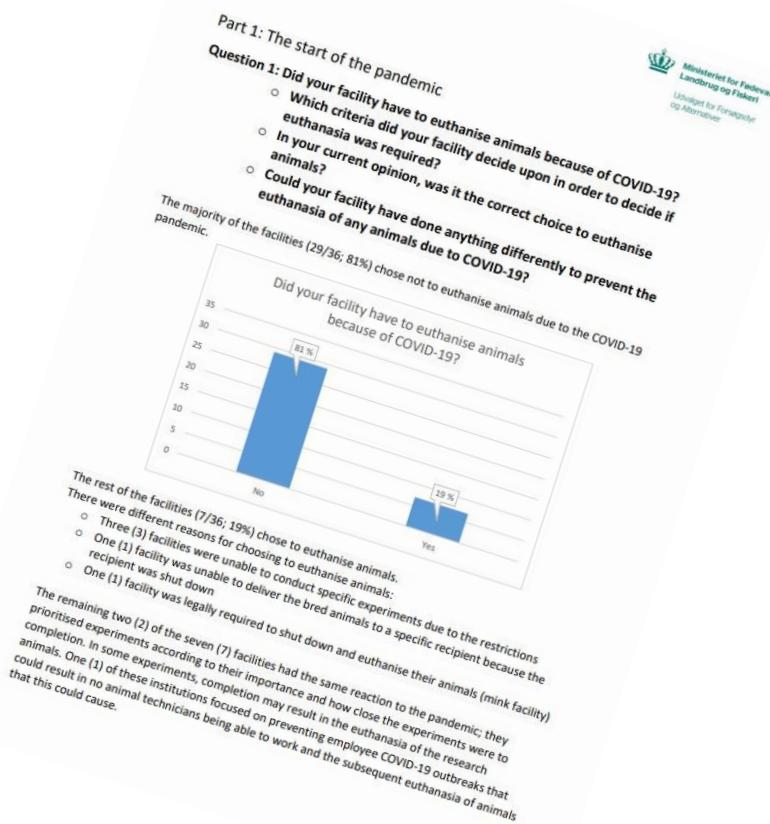
Funding 2022

- Replacement of meningioma animal models with a meningioma ex vivo/organoid model to test pharmacological advances in meningioma treatment
- The PluriLum assay: A novel stem cell-based assay for testing of chemicals' embryotoxic effects
- Use of ultrasound for early diagnosis of necrotizing enterocolitis in laboratory premature piglets

Cooperation with The Animal Experiment Council



Animal research facilities and COVID-19



Experimental animals with the highest degree of suffering

- EAE
- Fish

| Danmarks 3R-Center Responsabilitet · Respekt · Ressources | | |
|--|-------------------|-------|
| Experimental animals with the highest degree of suffering in 2021 | | |
| For several years, the Danish 3R-Center has been focused on the experimental animals that experience severe suffering as the result of experimental procedures. The reason for this has been for the 3R-Center to remain updated on the number of animals used in these procedures and to discuss the possibilities for reducing the amount of suffering inflicted on the animals. | | |
| Due to the EU Directive on the protection of animals used for scientific purposes, animal experiments must be classified according to the degree of suffering that the animals experience during the experiment (mild, moderate or severe). Animals that are anesthetized during an experiment and do not recover, are categorized as non-recovery. The severe category represents the group of animals that experience the most severe degree of suffering in regards to what is allowed by the Animal Experiments Act. The number and type of animals inflicted with the highest degree of suffering can be seen in Table 1. | | |
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| Table 1. The number and type of animals that were reported to the Animal Experiments Inspectorate as having experienced severe suffering in 2015 and 2019. | | |
| In 2017 and 2021, the Danish 3R-Center conducted a number of interviews with some of the researchers who had performed experiments where the highest degree of suffering was recorded. | | |
| The table does not include animals that died spontaneously without a diagnosis that ruled out severe suffering and was therefore recorded as having experienced severe suffering. In 2019, this concerned 229 animals, and it is not a number of concern when the total number of used experimental animals is considered. | | |
| Animal species | Number of animals | |
| Mice | 2015 | 2019 |
| Rats | 1,387 | 1,746 |
| Rabbits | 279 | 149 |
| Pigs | 4 | 4 |
| Cows | 130 | 91 |
| Zebrafish | 0 | 12 |
| Other fish | 80 | 62 |
| Total | 2,168 | 2,054 |
| | | 4,118 |

Experimental animals in education

- Permission required
- No Permission Required





The annual meeting for the animal welfare bodies

Program formiddag (08.45-12.45)

- 08.45-09.15: Morgenmad og mulighed for at opstille medbragt 3R-tiltag til markedspladsen
- 09.15-09.25: **Velkomst ved Axel Kornerup Hansen**, formand for Udvalget for Forsøgsdyr og Alternativer
- 09.25-09.40: **Vurdering af belastningsgrader i henhold til lovgivningen** (Katrine Svendsen, Dyreforsøgstilsynet)
- 09.40-10.00: **Udvalgets undersøgelse om "Forsøgsdyr i højeste belastnings-kategori"** (Axel Kornerup Hansen, formand for Udvalget for Forsøgsdyr og Alternativer)
- 10.00-10.20: **Experimental Autoimmune Encephalomyelitis: An invaluable model for multiple sclerosis and type 3 inflammation** (online) (Vasileios Bekiaris, DTU)
- 10.20-10.40: **Infektionsforsøg i fisk** (Kurt Buchmann, KU)
- 10.40-11.00: Livets svære start for præmature nyfødte (Thomas Thymann, KU)
- 11.00-11.15: Pause
- 11.15-11.20: Workshop – Introduktion til gruppearbejdet (Emne: mulighederne for at mindske belastningsgraden)
- 11.20-12.20: Workshop – diskussion i grupper
- 12.20-12.45: Workshop – opsamling i plenum

12.45-13.45: Frokost og Markedsplads

Mødet åbnes for alle interesserede deltagere resten af eftermiddagen.

Vinder af bedste forsøgdysrinitiativ 2022 blev Louise Langhorn og Diana Bianca Hansen fra SDU for deres initiativ vedr. træning af får(video).

Program eftermiddag (13.45-15.30)

- 13.45-14.15: Nothing to do when not being tested: Boredom in laboratory rodents (Lars Lewejohann, Freie Universität Berlin (online og på engelsk))
- 14.15-14.35: Observer Effects & the Uncertainty of Mouse Glucose Phenotyping (Thomas Svava Nielsen, KU)
- 14.35-14.55: Refinement of per oral dosering af marsvin inklusiv tilvænning til håndtering og fiksering (Christian Nyberg og Gitte Lund, Leo Pharma)
- 14.55-15.15: Automatiseret monitorering i dyremodeller til studier af vacciner mod virusinfektioner (Gabriel Petersen, SSI)
- 15.15-15.30: Afsluttende bemærkninger (Axel Kornerup Hansen, formand for Udvalget for Forsøgsdyr og Alternativer)

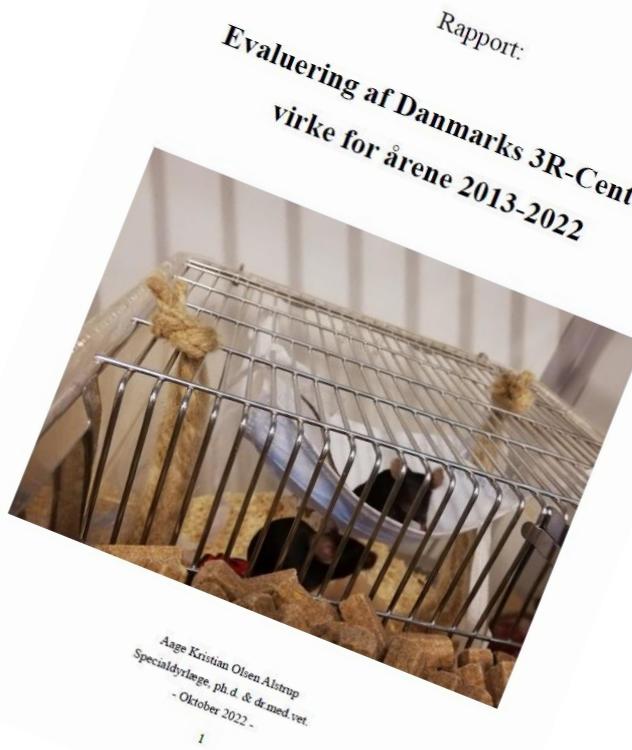




Ministry of Food, Agriculture
and Fisheries of Denmark

Danish National Committee
for the Protection of Animals
used for Scientific Purposes

Evaluation of 3R Center and Committee



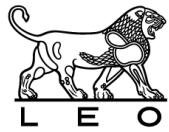
New board 2023-



See you next year at...

Radisson Blu Scandinavia Hotel, Copenhagen

November 6-7



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