

The Danish 3R-Center

Axel Kornerup Hansen, Chairman of the Board
NORECOPA Jubilee 2025

Could you tell us about

- ▶ Experiences in developing the Danish 3R Center
- ▶ Current projects
- ▶ Future plans (if they're not secret!)
- ▶ Views on what Norecopa should be doing from now on

Organisation

Ministry of Food, Fisheries and Agriculture of Denmark

Danish Veterinary and Food Administration

Other
administrations

Department of
Animal Welfare and Veterinary Medicine

Other
departments

The Danish 3R-Center

The Animal
Experiments
Inspectorate

Other subunits

Financial support
Pharmaceutical
Animal welfare
Government

Board of the 3R-
Center
(7 members)

The National
Committee
(7 members)

The Danish
Animal
Experimentation
Council
(11 members)

Vision

DACOPA
2005

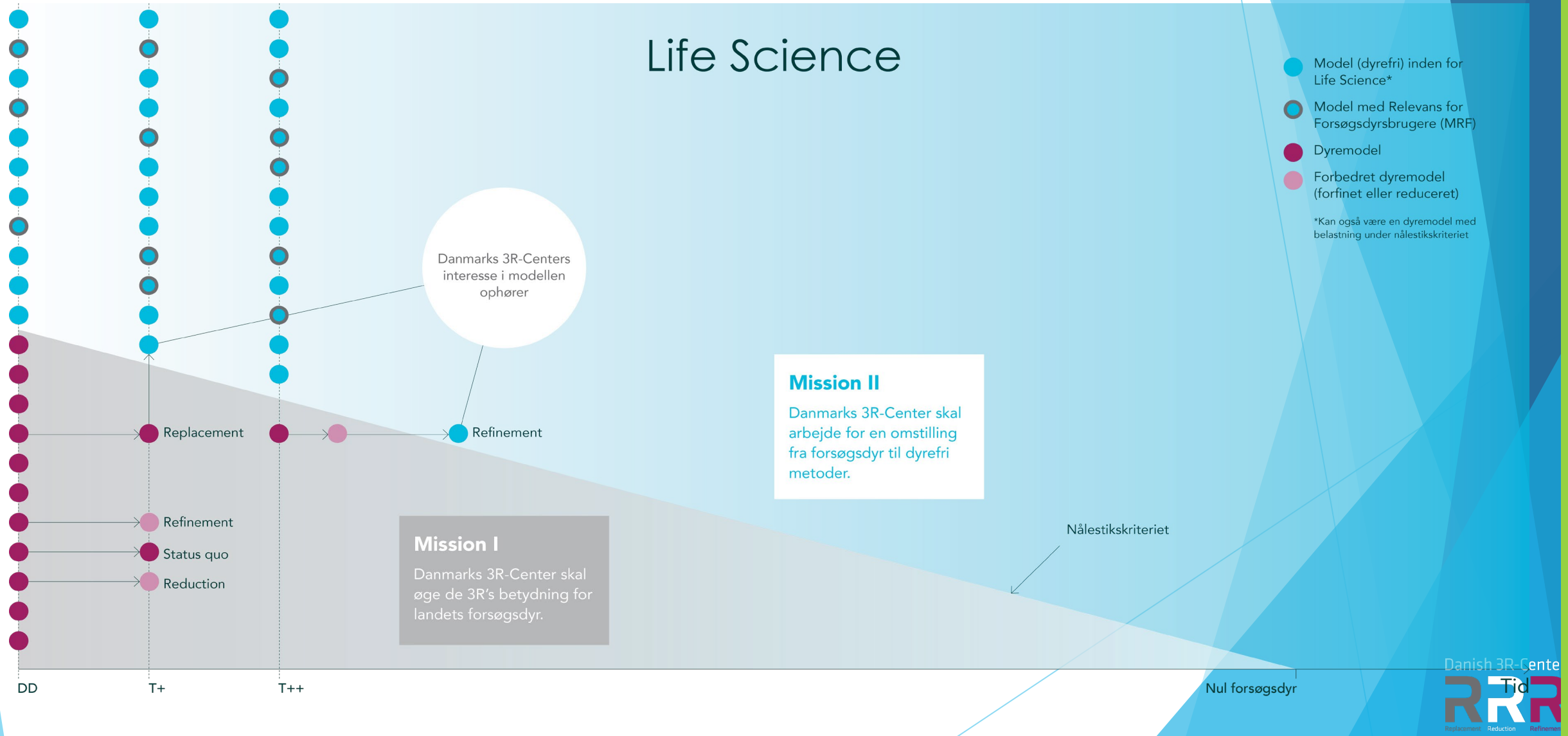


It is the goal of the Danish 3R-Centre to generate a leading environment within the implementation and dissemination of the 3Rs

There is no need for experimental animals in tomorrow's Denmark



Danish 3R-Centres Vision for A Future without Laboratory Animals



Finances (2013)

Ministry
(200.000 kr. allocated National Committee)

1.500.000 DKK

Stakeholders:

- Dyrenes Beskyttelse
- Forsøgsdyrenes Værn
- Leo Pharma
- Novo Nordisk
- Lundbeck

300.000 DKK

300.000 DKK

300.000 DKK

300.000 DKK

300.000 DKK

Total:

3.000.000 DKK

On behalf of the Minister of Environment and Food the Danish 3R-Center can annually hand out 1.500.000 DKK. as research funds.

Finances (2025)

Ministry
(200.000 kr. allocated National Committee)

1.500.000 DKK

Stakeholders:

- Dyrenes Beskyttelse
- DOSO

100.000 DKK

50.000 DKK

- Novo Nordisk
- Lundbeck

350.000 DKK

350.000 DKK

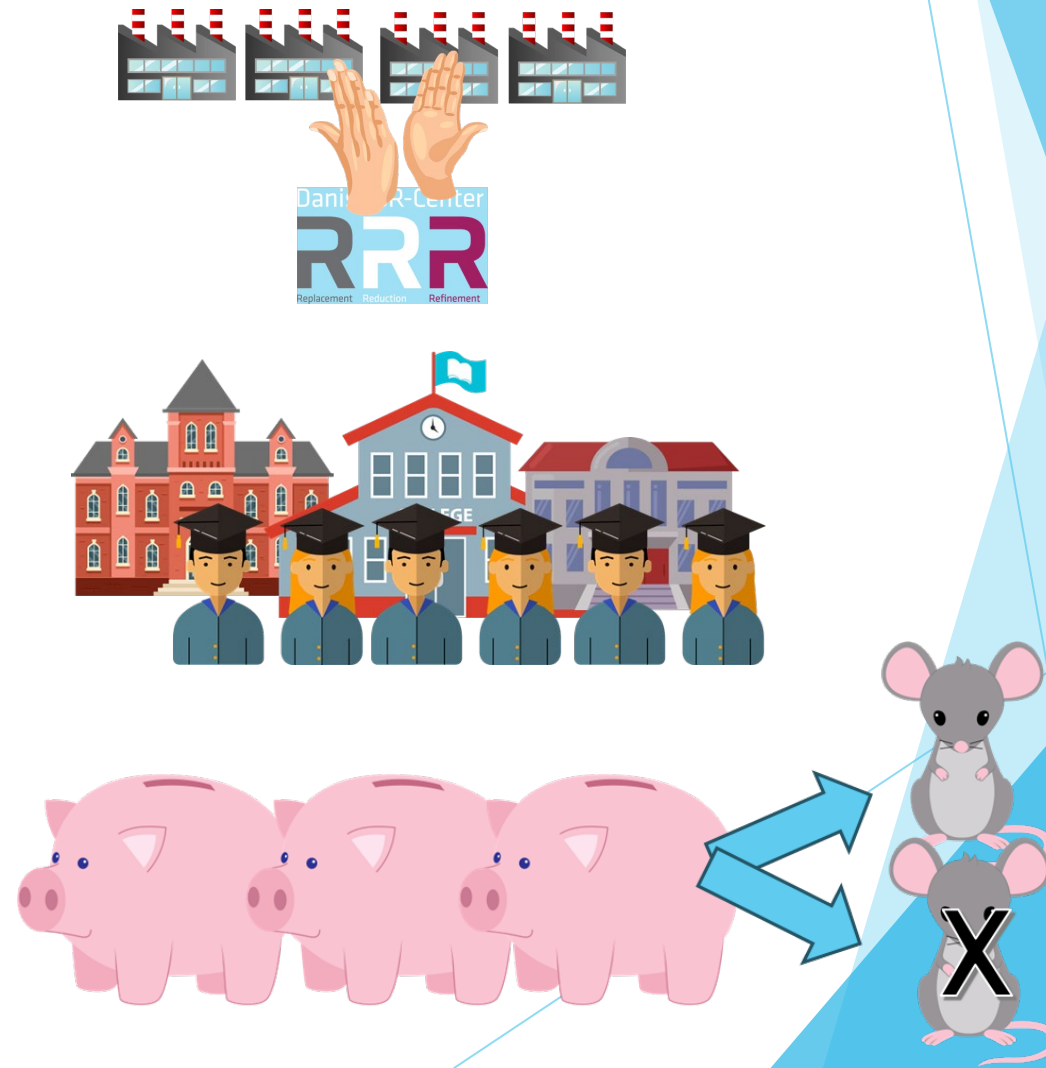
Total:

2.250.000 DKK

On behalf of the Minister of Environment and Food the Danish 3R-Center can annually hand out 1.500.000 DKK. as research funds.

Economic strategy 2025

- ▶ More stakeholders
 - ▶ Industry
- ▶ More PhD projects
 - ▶ Universities
- ▶ More research funding
 - ▶ Private and public foundations



Current work



Ministeriet for Fødevarer,
Landbrug og Fiskeri
Udvalget for Forsøgsdyr og Alternativer



Arbejdsopgaver udført af henholdsvis Udvalget for Forsøgsdyr og Alternativer og Danmarks 3R-Center i perioden 2023 til ?

Følgende personer udgør bestyrelsen: Axel Kornerup Hansen (formand), Lotte Martoft, Cathrine Bundgaard, Birgitte Kousholt, Erwin Roggen, Terje Svingen og Peter Bollen

Udvalget for Forsøgsdyr og Alternativer

2023

- Afholdelse af Dyrevelfærdsorganernes Årsmøde (13. juni på Københavns Universitet)
 - Uddeling af pris til bedste initiativ på årsmødets markedsplads (vinder: Trine Berthing et al fra Det Nationale Forskningscenter for Arbejdsmiljø for posteren "Daily oral dosing of nanoparticles in rats gavage versus snack")
- Præsentation af arbejdet i regi af det danske nationale udvalg for den "Norske nasjonale komiteen for beskyttelse av forsøksdyr"

2024

- Afholdelse (i samarbejde med Dyreforsøgstilsynet) af miniseminar "forsøg med fisk i et klima under forandring" på Forsøgsdyrenes Dag (24. april på KU)
- Afholdelse af Dyrevelfærdsorganernes Årsmøde (4. juni på Lundbeck)
 - Uddeling af priser til henholdsvis Scantox og Ellegaard Göttingen Minipigs for bedste initiativer på årsmødets "markedsplads"
- Udtalelse om dyrefri core-faciliteter offentliggjort (5. september 2024)
- Statement about non-animal core facilities (5. September 2024)
- Afholdelse af møde for Europas nationale komiteer i København (1.-2. oktober 2024)
- Afholdelse af møde med repræsentanter for landets dyrevelfærdsorganer (DVO Samarbejdsforum) (5. november 2024)

2025

- Afholdelse af møde i DVO Samarbejdsforum (10. april) om aldrende dyr i forsøg
- Afholdelse af Dyrevelfærdsorganernes Årsmøde 2025 (12. juni på Lundbeck)

Research &
Knowledge
collection



Konferences



Meetings with research
groups

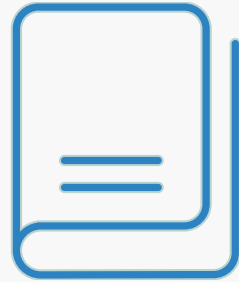


Research support



Internet

Dissemination



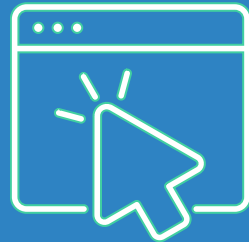
Annual report



Statements, guidelines,
recommendations



3R
Symposium



Homepages

3rcenter.dk

EU3RNET.org

(Europæisk samarbejde, hjemmeside åbner ultimo 2025)

Togeth3R
CONSORTIUM

Webinars (Togeth3R)



ANFREES*

*ANimal FREE Science



Guidance documents and statements

- Experimental animals with the highest degree of suffering
- Statement about non-animal core facilities
- Recommendation on antibodies
- Use of animals in teaching
- Guide to assessing laboratory animal welfare when working with external partners

Step 1: Overall factors relevant to the assessment of the facility

Factor	Issues requiring attention	Information
Legislation	Not all countries have legislation or regulatory supervision in the field of laboratory animals, and the standard may therefore be lower than in Europe/Denmark.	Directive of the European Parliament and of the Council on the protection of animals used for scientific purposes Legislation in other parts of the world

Step 2: Animal welfare matters relevant to the assessment of the facility

Welfare area	Issues requiring attention	Information
Housing	The housing of laboratory animals is of great importance to their welfare, as their physiological needs must be met insofar as possible. Ask to see the animal housing and enquire about matters relevant to animal welfare. If physical visits are not possible, many facilities offer virtual tours or access to films and images. You may want to consider speaking with scientists, animal keepers and veterinarians and the animal welfare officer, as they can often provide the necessary information. When entering into a collaboration agreement with a contract research laboratory, it is often possible to purchase additional space.	Housing and husbandry: Mouse Housing and husbandry: Rat Housing and husbandry: Dog Housing and husbandry: Non-human primate Recommendations on group housing of male mice
Purchasing and transporting animals	It is important that the laboratory animals are acquired from registered breeders in order to ensure the animals' health status, etc. It is also important that animals are transported to the facility in a gentle manner. After transportation, the animals must be acclimatized for an adequate period to adjust to their new environment before experimentation begins.	Best practice for animal transport Acclimatization of rats prior to experiments (coming soon) Acclimatization of mice prior to experiments (coming soon)
Handling	Laboratory animals should be handled as gently as possible. Handling is essential for the animals to accept human contact, which allows procedures to be carried out in the best possible manner.	Handling and restraint: General principles Handling and training of mice and rats for low stress procedures

new applications for permission to use already approved antibody products.

This makes it possible to meet the requirements of the Act on Animal Experimentation that permission be granted for a specified type of experiments (section 3(1)) and that animals may not be used if non-animal methods must be assumed to be equally suitable (section 6(3)).

a continued animals for

3R-projects supported by the Danish 3R-Center in 2014

- Establishment of an In vitro model for diabetic atherosclerosis
- Pathological and immunological consequences of basic experimental animal
- Reducing the group size in studies of dermatitis by standardization of the gut microbiota
- Refinement of animal models of pain: Establishment of strategies to alleviate

The Danish 3R-Center will promote the 3Rs by initiating research projects focusing on one or more of the 3Rs. Every year 1,5 million DKK is

information about our annual symposium

3R-projects supported by the Danish 3R-center in 2020

- Establishment of an in vitro model to investigate extracellular matrix and vascular mechanical interactions in human arterial disease
- Fighting irreproducibility in preclinical medicine using a meta-analytical approach for detecting flaws in behavior-based testing
- Introduction of new human ex vivo model systems to study tumorigenesis in kidney cancer

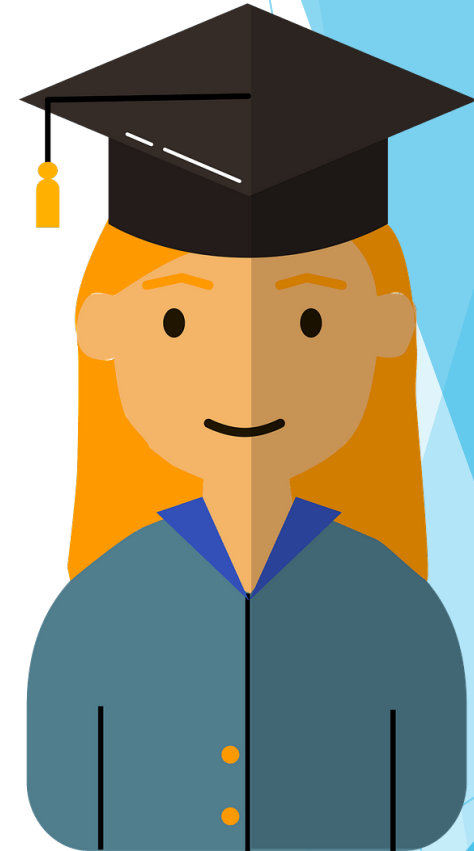
3R-projects supported by the Danish 3R-center in 2025

- Objective measurements of welfare in rats
- A simple method to avoid overlooked pain and disease during metabolic tolerance tests
- Intestinal organoids from preterm pigs as an in vitro model for necrotizing enterocolitis research

Awards



The 3R Award

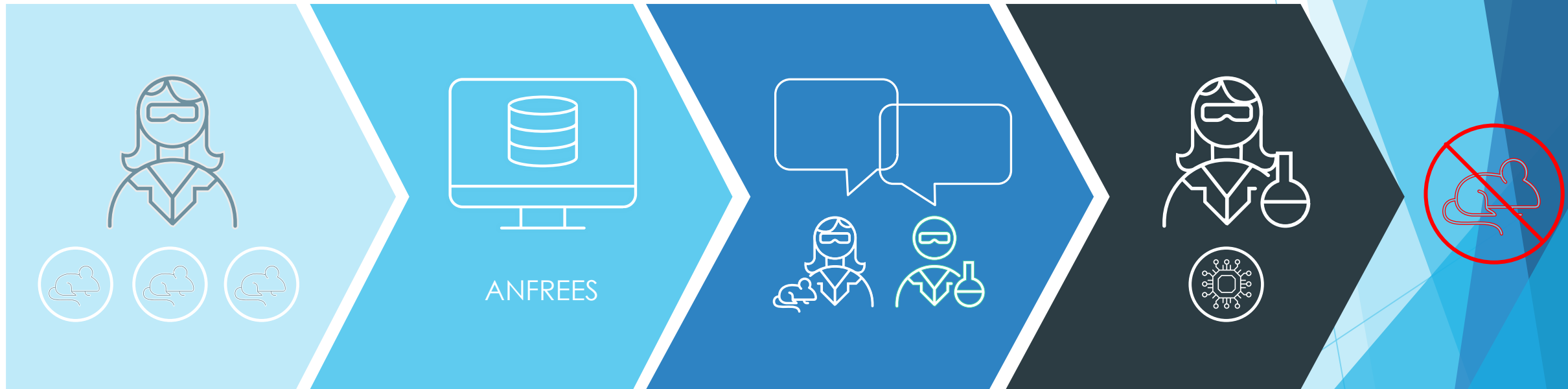


The Talent Prize

ANFREES*

– a pilot project

*ANimal FREE Science



Why is the Danish 3R-Centre a success?

- ▶ Resources
- ▶ Dedicated staff and board members
- ▶ ‘We are here for you’-attitude

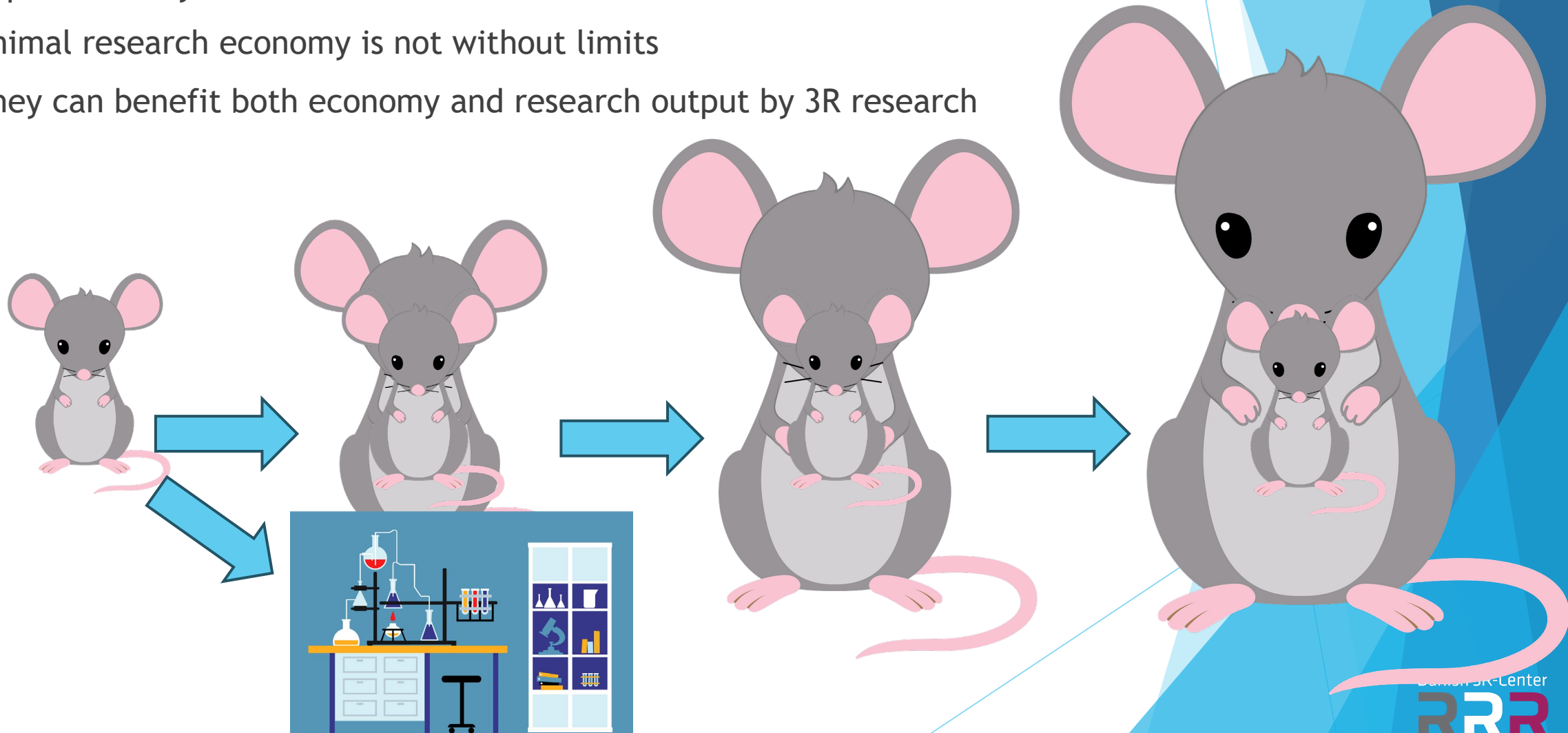


What can you do in Norway?



Key university issues

- ▶ Reproducibility and translation crisis
- ▶ Animal research economy is not without limits
- ▶ They can benefit both economy and research output by 3R research



Thank you

- ▶ To NORECOPA for an enormous effort for 3Rs over years
- ▶ To Creazilla.com for the cliparts
- ▶ To the Danish 3R Centre staff and board
- ▶ To you for your attention and dedication

