

# A new Nordic Zebrafish Network

Education, harmonization and cooperation



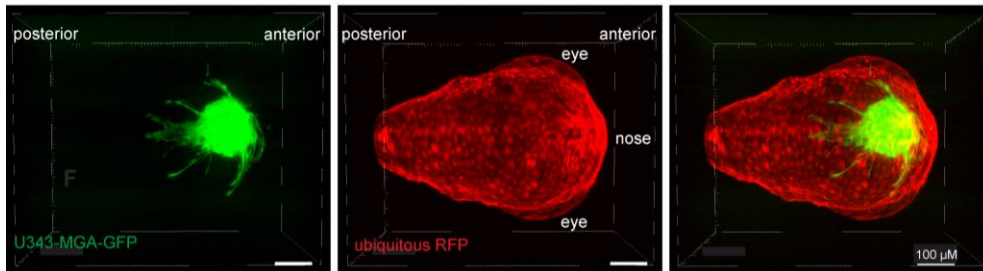
# The zebrafish core facility at KI

- We are a team of seven staff and one designated veterinarian
- We provide service from husbandry to managing complex research projects
- We serve ca 50 user groups and process around 1000 orders a year
- We lecture, teach and communicate to the public



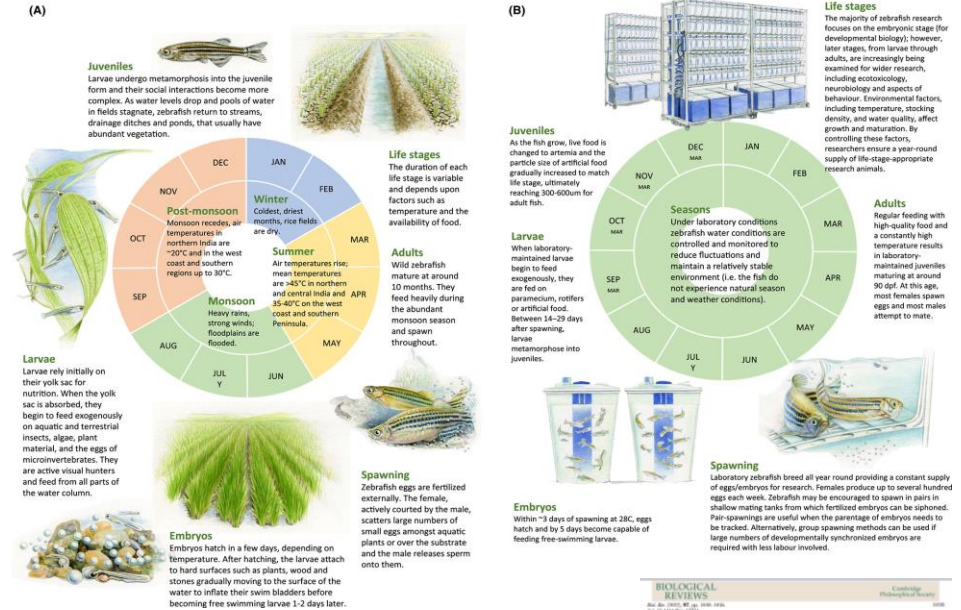
# The zebrafish animal model

- Widely used in research since ca 1990
- 2<sup>nd</sup> most used animal model in the EU
- Used in basic research, translational research and pre-clinical research
- Important part of a 3R strategy



# Husbandry and science – far from being standardized

- The husbandry of zebrafish is easy – but very hard to standardize
- No education on zebrafish for animal caretakers available
- Many fish facilities are run by researchers and are not professional animal facilities



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Improving zebrafish laboratory welfare and scientific research through understanding their natural history

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# What can we do about it?

- We were leading a new working group and established a zebrafish specific and harmonized Felasa-A course. Since 2023, this course is available to the NCLASET consortium in Sweden.
- Together with the NordUniversity Bodö, we jointly organized the first zebrafish husbandry course in November 2023 at Karolinska Institutet
- Together with the NordUniversity Bodö, we jointly organized the Nordic Zebrafish meeting 2023

# The annual hands-on zebrafish husbandry course

- An annual course specifically for people working hands-on with zebrafish husbandry
  - Rearing of zebrafish
  - Water quality and housing conditions
  - Analgesia and euthanasia
  - Small surgical procedures
  - Cryopreservation and IVF
  - Problem solving and emergency planning





# The NordicZebrafishNetwork

- A network for all that work with zebrafish in the Nordic countries
  - Bring together husbandry staff, facility heads, veterinarians and scientists
  - Establish 3R strategies
  - Facilitate knowledge sharing
  - Work on standardization

The screenshot shows a webpage for the Nordic Zebrafish Network (NZN) on the Karolinska Research website. The page has a dark purple header with the Karolinska Institute logo and the word "Research". Below the header is a breadcrumb trail: "/ Research / Research infrastructure and environments / Core facilities for research / Zebrafish core facility / The Nordic zebrafish network".

On the left side, there is a "Navigate on the page" sidebar with three items: "The Nordic zebrafish network", "Our key focus areas", and "The benefits of a membership".

The main content area is titled "The Nordic zebrafish network" and contains the following text: "The Nordic Zebrafish Network (NZN) was established as a result of a workshop meeting in Stockholm, with the aim to bring together scientists and animal caretaker staff to improve the quality of husbandry and science." Below this is a paragraph: "In November 2023, almost all zebrafish facilities from the Nordic countries met in Stockholm. For two days, animal caretakers, facility heads and scientists discussed how research in zebrafish and husbandry of this laboratory animal can be optimized and harmonized to facilitate animal welfare and improve the significance and reproducibility of scientific data." This is followed by another paragraph: "It quickly became clear that the key is to bring together both researchers and animal caretaker staff as optimal husbandry procedures before, during and after scientific studies are equally important as harmonizing and standardizing experiments and data analysis."

To the right of the text is an image of a zebrafish brain with glowing neural connections, captioned "Photo Gerry Images".

Below the text is a section titled "Our key focus areas" which features two portrait photos: a woman with long brown hair on the left and a man with glasses and a beard on the right, both wearing blue scrubs.

On the far right, there is a "Related" section with three links: "Current member jobs of the NZN", "NZN events and news", and "Steering committee of the NZN".

# The NordicZebrafishNetwork activities in 2024

- Building the Network and establishing the homepage
- Organizing the annual husbandry course at Karolinska Institutet in November 2024
- Organizing the Nordic Zebrafish Meeting at Karolinska Institutet in November 2024







**Karolinska  
Institutet**