

## **Karolinska Institutet Animal Welfare Body Annual report 2020**

### **Background**

The Karolinska Institutet (KI) has the mission to improve human health and to find new strategies to curb human diseases. Many of the research projects at KI are based on data from laboratory animals of different species. Research involving laboratory animal is regulated by The Animal Welfare Act 2018:1192, The Animal Welfare Ordinance 2019:66 and The Swedish Board of Agriculture's Regulations and General Advice on experimental animals, SJVFS 2019:9 Saknr L150. All animals used for scientific purposes are protected by law and must be treated in the best possible way, both, regarding housing and experimental conditions according to the legislation in Sweden. Each organization carrying out animal research must establish an animal welfare body (AWB), with well-defined roles and a composition of professionals stipulated in L150, chapter 5.

The AWB at KI is an independent authority, which during 2020 consisted of eight members: the chairmen, the named animal care and welfare officer, a veterinarian and its deputy, a researcher and its deputy, an animal technician personnel and its deputy. In all matters concerning aquatic animals or non-human primates an expert respectively an ethologist is consulted. From July 2018, the AWB has the mandate to take decisions on amendments to ethics permits following an application from the principal investigator. At KI all AWB decisions are taken by majority vote and the AWB reports directly to the Committee of Research and the Site License Holder.

### **Meetings and working structure**

The AWB delegates met regularly, roughly every 3 weeks, for consultations and formal decisions. At the 13 meetings during 2020, a total of 38 amendment applications have been handled and approved. Twenty-eight of the amendments were administrative decisions, concerning additions of animal facilities or changes of responsible principal investigator. Ten amendment applications involved other changes which did not risk affecting the welfare of experimental animals in a negative way, in contrary, several decisions improved animal welfare.

The AWB has systematically reviewed SOPs (standard operational procedures) for animal care and veterinary plans at KM facilities.

In collaboration with several research groups AWB has compiled recommendations for the health assessment of mice and rats treated with streptozotocin (animal models for diabetics) as well as recommendations for health assessment of

mice and rats prior weaning. AWB has also worked on adjusting legal requirement for zebrafish husbandry, on reducing the infection risk and increasing the welfare of the aquatic animals.

On behalf of KI and together with the KM site license holder, AWB has review two investigation on proposed law changes which impact on animal welfare: Crimes on animals - tougher sanctions and more effective punishment; and Administration or animal research using wild animals?

### **Consultation meetings with AWB**

Regular consultations with representatives from AWBs from Universities in the region have been established. This information exchange is particularly beneficial to facilitate collaborative research projects and research groups active in several sites.

On November 10<sup>th</sup>, representatives from the AWB at KI participated at the national AWB meeting organized by the Swedish 3R-Center. The impact of Covid-19 on animal research and animal welfare was one focus of this digital meeting.

Collaborations between AWBs, their advantages and difficulties were highlighted in the second part of the meeting.

### **Goals for 2021**

- Compile more recommendations for assessment templates to score the animal condition in specific animal models. This will be done in collaboration with researcher and includes efforts to implement hypothermic shock as method for zebrafish euthanasia as well as new protocols for post-surgical analgesia for adult fish.
- Facilitate the start off and coordinate 3R-groups at different KM animal facilities
- Invite KI scientists using various animal models to AWB-meetings for knowledge transfer.
- Continuously review and analyze SOPs, retrospective reports from CDFN, plans and strategy documents involving animal welfare. The information will be used to improve the animal welfare in current research at KI.
- Outreach in form of lectures and workshops (CPD activities).
- Continuously work on how AWB can support science at KI.
- Networking with AWBs from other Universities in the region, to improve and facilitate research projects / research groups active at different sites e.g. common workshops.

*Stockholm, the 28<sup>th</sup> of January*