

AniMatch, an innovative web-based platform to share organs and tissues

Annemarie Lang

Department of Rheumatology and Clinical Immunology, Charité-Universitätsmedizin Berlin, Germany
AniMatch UG (haftungsbeschränkt), Berlin, Germany

Besides the general enhancement of the protection level for animals used in scientific experiments, the European directive 2010/63/EU includes the request that “Member States shall facilitate, where appropriate, the establishment of programs for the sharing of organs and tissues of animals killed.” (Recital 27 and Article 18 2010/63/EU). During the last years, the number of animals that have been used for scientific purposes in Europe has increased. The itemization of categories revealed scarcely used potential to reduce animals that are not used in experiments but for the collection of tissue and organs. The development and deployment of a web-based platform that enables scientists to connect and share organs and tissue of killed animals would directly address the request of the EU directive as well as exploit the existing potential to reduce animals and save the biological resources that are gained. Therefore, we have developed AniMatch (www.animatch.eu), an innovative web-based platform that allows scientists to register and publish or search for offers to facilitate the multiple use of killed animals. To publish an offer the providing party has to quote the species, type and if necessary the genetic background as well as the number, age, sex, the organ or tissue that is used for own purposes and the timeframe for the killing. The seeking party can search a list including filters for the species and a geographical radius and request while quoting the number of animals and organs or tissue in need. With completion of the request the contact information is exchanged between both parties who are now able to arrange the details of the transfer. Optimizations of our service have been performed after intensive discussions with animal welfare officers in Berlin. Subsequently, we have implemented two safety barriers in the registration process in order to avoid abuse. The measures include approval of affiliation and account activation by the designated animal welfare officer. Furthermore, we integrated a complex matching system that focuses on the verification of the different microbiological units (hygienic management system) that have to be considered during the sharing process. Besides the moral exculpation of scientists, AniMatch provides a cost efficient way to use existing infrastructure and to conserve resources in accordance with reducing lab animal usage. To our knowledge this is the first approach to address the challenge for multiple use of killed animals in science.