

Die Landestierschutzbeauftragte

Senatsverwaltung für Justiz, Verbraucherschutz und
Antidiskriminierung • Salzburger Str. 21 – 25 • 10825 Berlin

Geschäftszeichen (bitte immer angeben)

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Elektronische Zugangseröffnung gemäß
§ 3a Abs.1 VwVfG: www.egvp.de

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Description of and Guidelines for two Awards available for the Development of New Approach Methods (NAMs) to further the Application of Human-relevant Replacement Methods in Biomedical Research

Two Awards of a total of 60.000 € for innovative, animal-free research methods

For years, the public has been requesting that more is done to replace and reduce the use of animals in testing and research (e.g., FRAME, 2020), and thus the development of animal-free research methods must be supported to expand and accelerate their use. Nonetheless, in the current scientific paradigm animal experimentation is still considered to be the “gold standard” with which to investigate, understand and ultimately cure, human disease. However, there is mounting evidence that, not only from an ethical standpoint but also from a scientific one, a paradigm change away from the use of animals for biomedical research is inevitable and necessary (Herrmann and Jayne, 2019). The translational success rate from animal experiments to the human setting is extremely low (Ram, 2019), and the results of animal tests are often misleading, implying success that fails to be realized in humans (Kramer and Greek, 2018). One major reason for this is species differences between us and other animals (Pound and Ritskes-Hoitinga, 2018), something that William Russell and Rex Burch, the originators of the 3Rs (Replace, Reduce, Refine) Principles in 1959 recognized. Today, 62 years later, we are amid a new technological era that is offering undreamt-of opportunities for scientific experimentation (see e.g., Herrmann, Pistollato and Stephens, 2019). Although many of the animal-free, human biology-based New Approach Methods (NAMs) are still in their infancy, the use of human organoids, human organ-on-chip-technology, human induced pluripotent stem cells, as well as machine learning and artificial intelligence, is beginning to drastically change biomedical science for the better. If scientists continue to advance these human-biology based NAMs, and if funders provide sufficient resources, these innovative, human-relevant approaches have the potential to supersede animal experiments and become science’s new gold standard. This would not only prevent the suffering and death of countless millions of nonhuman animals but also expedite biomedical research and accomplish a paradigm change that would benefit humans and nonhuman animals alike.

Verkehrsverbindungen:  104, M 46 bis Rathaus Schöneberg,  4 bis Rathaus Schöneberg  ,  7 bis Bayerischer Platz 
Eingang zum Dienstgebäude: Salzburger/Ecke Badensche Straße, 10825 Berlin-Schöneberg

Zahlungen bitte bargeldlos an die Landeshauptkasse Berlin, 10789 Berlin, auf eines der folgenden Konten:

Geldinstitut	IBAN:	BIC:	Geldinstitut	IBAN:	BIC:
Postbank Berlin	DE47100100100000058100	PBNKDEFF100	Bundesbank, Filiale Berlin	DE53100000000010001520	MARKDEF1100

The Animal Protection Commissioner of Berlin prioritizes the funding of two Awards for the development of NAMs to actively support the shift from tradition-based animal experimentation to human-relevant health research: The Early Career Scientist Award is for a promising research proposal from an up-and-coming scientist that will advance the development and uptake of NAMs; the second Award is for an already ongoing, auspicious project developing and/or using NAMs that needs additional funding for continuation. Each Award includes prize money of 30.000 €. The winners will be selected by an independent jury of international scientists with longstanding expertise in NAMs, based on predefined selection criteria.

National and international scientists can apply!

The application documents must be submitted by October 17, 2021, by email to tierschutzbeauftragte@senjustva.berlin.de or by post to Senatsverwaltung für Justiz, Verbraucherschutz und Antidiskriminierung, Stabsstelle der Landestierschutzbeauftragten, Salzburger Str. 21-25, 10825 Berlin (post-receipt). Please closely follow the Award Guidelines. The awardees will be informed by mid-November 2021. The Award Ceremony will take place during Berlin's Animal Protection Day event on Saturday, November 27, 2021. Please block this day when applying for an award as the winners will be required to publicly present their project proposal (Early Career Scientist Award) or their ongoing project (Ongoing Project Award) during this event. Another prerequisite for these awards is that the winner is willing to present their project results in the 3Rs Training series of the Animal Protection Commissioner with the goal of ensuring a widespread knowledge transfer in Berlin's research landscape and beyond.

References:

FRAME (2020). Global study by FRAME revealed overwhelming majority of people (93.4%) think more needs to be done to replace and reduce the use of animals in testing and research. <https://frame.org.uk/latest/research-confirms-public-desire-for-alternatives-to-using-animals-in-research/>

Herrmann, K. and Jayne, K. (2019). *Animal experimentation: Working Towards a Paradigm Change* (p. 752). Brill. <https://library.oapen.org/handle/20.500.12657/38145>

Herrmann, K., Pistollato, F. and Stephens, M. L. (2019). Beyond the 3Rs: Expanding the use of human-relevant replacement methods in biomedical research. *ALTEX-Alternatives to animal experimentation*, 36(3), 343-352. <https://www.altex.org/index.php/altex/article/view/1301>

Kramer, L. A. and Greek, R. (2018). Human stakeholders and the use of animals in drug development. *Business and Society Review*, 123(1), 3-58. <https://onlinelibrary.wiley.com/doi/abs/10.1111/basr.12134>

Pound, P. and Ritskes-Hoitinga, M. (2018). Is it possible to overcome issues of external validity in preclinical animal research? Why most animal models are bound to fail. *Journal of Translational Medicine*, 16(1), p.304. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0193758>

Ram, R. (2019). Extrapolation of animal research data to humans: an analysis of the evidence. In *Animal Experimentation: Working towards a paradigm change* (pp. 341-375). Brill. https://library.oapen.org/bitstream/handle/20.500.12657/38145/9789004391192_webready_content_text.pdf?sequence=1#page=380

Russell, W.M.S. and Burch, R.L. (1959). *The Principles of Humane Experimental Technique*. Methuen.

Guidelines for competitive tendering procedure of the Science Awards for Alternatives to Animal Experiments by the Animal Protection Commissioner of Berlin

1) Scope of the Awards

For the Early Career Scientist Award, the successful project proposal must have demonstrable potential to contribute to replacing animal experiments in biomedical research. For the Ongoing Project Award, the project must be developing and/or using NAMs, and the applicant needs to demonstrate how the additional funding will allow the project to reach its potential in helping to replace animal experiments in biomedical research.

Each Award includes prize money of 30.000 €. The awardees will be selected by an independent jury with longstanding expertise in NAMs and based on the selection criteria described under point 5) below.

2) Prerequisites

The proposal should clearly state which of the two Awards is being applied for. To apply for both Awards is not possible. Applicants based in universities, university hospitals and other research institutions in Germany or abroad are eligible to apply. Applicants must verify that they are scientifically credible and responsible to conclude the proposed research project, to be assessed through the project description, the CV and the questions.

For the Early Career Scientist Award, anyone less than 10 years from graduation of highest earned degree can apply.

Applicants must have not used laboratory animals in the past three years before submitting this application. This will be assessed by the questions in the attachment.

Applicants must disclose their financial plan and all existing or planned funding sources of the research projects as part of their research project description.

If the project already received an animal protection award or has been submitted for such a prize this needs to be indicated in the application.

Applications received after the application deadline (October 17, 2021) cannot be considered.

The winners agree to present their research project publicly during the Award Ceremony. In addition, they agree to present their project and research findings and area of application in one of the 3Rs Training webinars the Animal Protection Commissioner is hosting, to ensure a widespread knowledge transfer in Berlin's research landscape and beyond.

3) Documents to be submitted

The following documents are to be submitted (in English please):

- Identical for both Awards
 - As proof of credibility: list of scientific publications three years prior to this application, that had an impact on replacing animal experiments.
 - Signed answers to the questions regarding the animal-free research work of the applicants in the past three years before this submission (form in the attachment)

- Brief CV (no more than 3 pages)
- Project description (max. 8 pages, in English), that covers:
 - Relevance of the research for animal protection whilst taking into account
 - The type of animal experiment(s) that should be replaced by the New Approach Method,
 - The estimated number of animals and the species of animal(s) who should be spared by wider uptake of the NAM,
 - The severity of animal suffering incl. the degree of severity that is intended to be avoided with the use of the NAM.
 - The New Approach Method's applicability in biomedical research beyond the applicant's laboratory,
 - A plan to disseminate this work and promote the use of NAMs more broadly
 - Entire financial plan and complete list of existing or planned funding sources,
- For the Ongoing Project Award, please additionally submit:
 - Proof that initial funding is running out.
 - Scientifically convincing explanation of how the additional funding, if granted, will substantially increase the project's potential to replace animal experiments and justification of the need for the prize money.

4) Jury

The awarding follows the recommendation of the majority of the independent jury convened by the Animal Protection Commissioner. The members of the jury must not be directly or indirectly part of a proposed research project. They are bound to the selection criteria described under point 5).

The jury has at least five members who are respected scientists in the field of alternatives to animal experimentation and human-based methods as well as scientists in the area of animal protection.

The jury will present in writing and with proper explanation the results of the proposal assessment and the majority vote to the Animal Protection Commissioner.

5) Selection criteria

When assessing the project proposals, the following criteria will be considered by the jury:

- Degree of severity of the animal experiment(s) that is to be replaced,
- Possible consequences for laboratory animals (both in regards to prevalence of the experiment and in regards to number of animals used per experiment)
- Animal species and species-specific ability to suffer,
- Area(s) of application and relevance of the New Approach Method(s),
- Potential of the applicant to complete the work and promote the use of NAMs beyond this project.

Appendix:

Questions regarding animal-based work in the past three years prior to application

Have you used non-human animals (including invertebrates) or non-human animal parts (tissues, sera, cells, embryos, antibodies, cornea, etc.) in the past three years?

- Yes
- No

If the answer is yes, please specify:

Have you held a license for animal use, have you published work using non-human animals or animal parts in the past three years?

- Yes
- No

If the answer is yes, please specify:

Name:

Signature:

Place/Date: