

## MSD Animal Health Research Bursary for Veterinary Surgeons The Application Process

### 1. Eligibility criteria

The bursary scheme is open to all veterinary surgeons registered (MRCVS) and working in Great Britain. If you were awarded a bursary in 2018, you **cannot** apply again in 2019.

### 2. Anonymity of applicant from MSD Animal Health

To ensure a fair and transparent process in the awarding of a bursary, procedures have been put in place to keep the applicant details anonymous from MSD Animal Health. To support this aim please ensure you adhere to the following steps:

#### a. Enquiries prior to project submission

For enquiries on the application process or regarding a proposed project then please send an email to [msdahbursary@merck.com](mailto:msdahbursary@merck.com).

#### b. Submission of project applications

Applications should be emailed to [msdahbursary@merck.com](mailto:msdahbursary@merck.com) and write "Application for MSD Animal Health Research Bursary for Veterinary Surgeons" in the subject field of your email.

Please **do not** send any applications directly to MSD Animal Health, as they **will be excluded** from the selection process.

Applications will be acknowledged within 7 days of receipt. If you do not receive this acknowledgement, you are advised to send a further email to check your application has been received. Alternatively contact Mary Longhurst on 07803 205550.

### 3. Project submission deadline

The closing date for research bursary application submissions is Friday 29<sup>th</sup> November 2019. Applications received after this date will not be considered.

### 4. Research Bursary selection process

For the 2019 MSD Animal Health Research Bursary for veterinary surgeons applications will be considered in the following disease/subject areas:

- Ruminant Research Bursary:
  - Studies to investigate benefits incurred on farms resulting from holistic, proactive preventative health planning for flocks/herds.
  - Studies to investigate farmer attitudes/behaviours towards preventative health strategies.

- Cattle:
  - Young stock health and management
  - Infectious disease prevention (adult and young stock)
  - Mastitis control
- Sheep:
  - Improving flock health and productivity
  - Abortion prevention
  - Management of clostridial and pasteurella infection
  - Control of orf

Ruminant Bursary applications will be assessed by academic staff from the University of Bristol School of Veterinary Science.

- Companion Animal Research Bursary:
  - Canine/feline/equine infectious disease
  - Canine/feline vector borne disease
  - Canine/feline endocrinology
  - Companion animal preventative health care.

Companion Animal Bursary applications will be assessed by academic staff from the University of Nottingham Centre for Evidence Based Veterinary Medicine.

There cannot be more than three applications from the same organisation in any given year.

The assessment criteria will include:

- Quality of project design (see Appendix – Project Design Guidelines)
- Capability of delivering a successful project outcome
- Originality of project
- Relevance of results to veterinary surgeons in private practice.

*NB. A project does not need to study the use of a veterinary medicine, but where it does so, the use of such medicines must be within the licensed indication to be considered for a bursary.*

MSD Animal Health is not bound to award any bursaries if there are no projects deemed suitable for funding.

## **5. Notification of bursary**

Applicants should have received notification by 14th February 2020 as to whether they have been successful or not in being awarded a bursary.

## **6. Support for selected projects**

If required, support will be available from the relevant University for any projects awarded a research bursary.

## **7. Research Bursary Project deliverables**

On project completion, the research bursary recipient must provide a written final study report submitted to MSD Animal Health, detailing the research bursary project results and conclusions within 3 months of project completion.

## **8. Presentation/Publication of Research Bursary Project**

Research bursary recipients will be encouraged to present or publish their findings, as a poster or abstract, at a relevant UK veterinary congress.

*NB. MSD Animal Health, University of Bristol School of Veterinary Science and the University of Nottingham Centre for Evidence Based Veterinary Medicine reserve their rights to have their involvement in the study identified in any publications or presentations. The wording of any statement to be provided by MSD Animal Health.*

## **9. Contract**

Successful research bursary recipients will be asked to sign a research bursary contract prior to commencing the research project and receiving any funding.

## **Appendix – Project Design Guidelines**

### **Study design**

Studies are normally categorised into two main types – Descriptive or Analytical. Descriptive studies would include case reports/series, surveys and cost of disease. Analytical studies would include observational or experimental studies. Any of these study types is suitable and can be considered for a bursary, although bear in mind that the strength of evidence can vary between each.

Any project involving the use of live animals should use as few animals as necessary to prove a statistically significant result which shows that the results were not just due to chance. Detailed planning of a study is integral to these outcomes and should be undertaken with care.

**Experimental studies** involve researchers assigning subjects to groups (usually treatments and controls). These types of studies should incorporate attributes of the ‘ARRIVE’ guidelines (see <http://www.nc3rs.org.uk> and type in “Arrive Guidelines” in the search criteria). Randomised controlled trials performed on livestock with production, health or food safety outcomes should also meet the minimum guidelines of the ‘REFLECT’ statement (see <http://www.reflect-statement.org>)

**Observational studies** involve researchers observing animals already having exposures, receiving treatments, etc. for specific outcomes (incidence of disease, production parameters, etc.). The three major types of observational studies are cohort, case-control and cross-sectional studies. These types of studies should be fully defined and incorporate attributes of the ‘STROBE’ statement (see <http://www.strobe-statement.org> “Available Checklists”).

At the very minimum, all project details provided should address:

- What is the objective, or hypothesis(es) you are looking to test
- Design of the study and particularly how you will avoid bias in your results (randomisation, blinding, etc.)
- Housing and husbandry details
- How you determined sample size requirements (see more info below)
- Which experimental outcomes are being assessed
- Determination of how you might analyse the data and the statistical methods which you will employ

### **Sample size**

Sample size determination before commencement of a study is imperative. With too large a sample size, subjects, time and money will be used unnecessarily. With too small a sample size, researchers will be unable to determine whether or not any effect of a treatment really exists or if they were simply not able to determine its existence because not enough subjects were included in the study. Either of these scenarios is a waste, so sample size determination must be done in the planning of any study.

Mathematical formulae exist to assist with sample size calculations, but several websites, statistics packages, and other computerised programs are now available to make the process of pre-determining a sample size simpler. One that is specifically suggested for veterinary study sample size determination is <http://epitools.ausvet.com.au>. Be careful, however, when using this tool that you are clear on whether you are estimating proportions (percentages), means (averages), prevalences, etc. and select the correct link. If you need advice, consult someone with statistical knowledge.

Further Reading:

Neil Forbes. Undertaking research in practice 1. Why and what? In Practice 2001 23: 613 – 615

Neil Forbes. Undertaking research in practice : 2. How? In Practice 2002 24: 44 - 46

James Anderson and Helen Jukes. Clinical trials in practice: what do you need to know? In Practice 2007 29: 546-549