

BIOTECHNOLOGY AND BIOLOGICAL SCIENCES RESEARCH COUNCIL (UK)
DEFENCE SCIENCE AND TECHNOLOGY LABORATORY (UK)
DEPARTMENT FOR INTERNATIONAL DEVELOPMENT (UK)
ECONOMIC AND SOCIAL RESEARCH COUNCIL (UK)
MEDICAL RESEARCH COUNCIL (UK)
NATURAL ENVIRONMENT RESEARCH COUNCIL (UK)

Announcement of Opportunity (AO)

Zoonoses and Emerging Livestock Systems (ZELS)¹: Reducing the risk to livestock and people programme – Associated Studentships (ZELS-AS)

Joint Call for Proposals

Announcement of Opportunity: 14 April 2014

Closing date for proposals: 26 June 2014 at 16.00 BST

This AO should be read in conjunction with DFID's report.

Please note that this AO is the basis on which proposals will be assessed.

While BBSRC manage the ZELS programme on behalf of all funders and will award successful ZELS-AS, NERC will administer this call for ZELS-AS.

Summary

1. An expected key outcome of the ZEL-AS is to create a concentrated focus for doctoral training in ZELS related research, building a strong and active cohort of students who are able, and encouraged, to work together. The training environment should provide students with excellent opportunities to gain transferrable skills and to conduct original and scientifically excellent research.
2. **This is a restricted entry competition.** The ZELS programme invites proposals from consortia of organisations led by successful ZELS Research Partnership Grants (RPGs) grant holders (i.e. PI or Co-I) interested in hosting a cohort of doctoral students, whose research and training will support the aims of the ZELS programme.
3. Funding will be awarded for a single intake of 15 studentships. Studentships will begin in the academic year 2015-16.
4. Students will be managed as a single cohort. Seven or eight of the students in the cohort will be nationals of a developing country².
5. Each student is expected to have two supervisors: one in the UK and one in a developing country. Each student is expected to spend a minimum of 50% of their time in the developing country.
6. Proposals must comply with the [Conditions of Research Council Training Grants](#).
7. Applications must be submitted by email to stag@nerc.ac.uk using the proforma provided. The closing date for proposals is 16.00 on 26th June 2014.

¹Emerging livestock systems are defined as small scale livestock systems appearing in developing countries in response to the rising demand for animal products such as meat and milk. This programme also includes wider impacts of the emerging livestock systems on the food chain from production to consumption.

² Developing countries are defined according to the to the Development Assistance Committee (DAC) List of Recipients of Official Development Assistance as at 1 January 2013:

<http://www.oecd.org/dac/stats/DAC%20List%20used%20for%202012%20and%202013%20flows.pdf>

Background

8. The ZELS programme, launched in October 2012, made available £20.5M to make a step change in the research evidence available to inform decision makers on how to minimise the health risks associated with the rapidly changing nature of livestock systems in developing countries, with a focus on those risks which impact on the livelihoods and health of poor people.
9. The step change will result from combining: (1) a better understanding of how the context and characteristics of such systems (within the broader regional and global environmental and socio-economic context), affect the risks of emergence, development and transmission of diseases to livestock and/or humans; with (2) an understanding of the behaviour of individuals, communities and governments in monitoring, reporting and managing the risks.
10. The ZELS programme provides an innovative way in which a range of disciplines will be working together. It recognises that major progress in the research on the reduction of health risks to, and impact of zoonoses on, poor people and their livestock in the short to medium-term, will require a range of disciplines working together (e.g. biological, environmental, mathematical, public health, animal health and social sciences).
11. The programme's scope is therefore multi-level, interconnected and addresses the aim of reducing the impact of zoonoses on poor people and their livestock in developing countries. DFID's commitment to the goal of ending extreme poverty has led it to focus its funding on 28 countries primarily, but not exclusively, in sub-Saharan Africa and South Asia.
12. Research grants awarded through the ZELS programme take one of two forms:
 - **Topic Specific Project Grants** (TSPGs) are multi-partner, small and targeted projects that either address specific research gaps in knowledge which are likely to constrain delivery of the overall goal and may be relevant to a number of livestock systems, or address contextual issues relevant to ZELS.
 - **Research Partnership Grants** (RPGs) are multi-partner larger system-level projects aimed at understanding the functioning of various parts of the system, as well as the system as a whole, and which will thereby deliver the type of integrated output required for a step change in evidence provision. Some of these integrated outputs may incorporate findings from TSPGs
13. The **ZELS-AS call** will support inter-disciplinary doctoral training to build research capacity in the UK and developing countries, in particular in Sub-Saharan Africa and South Asia, aligned with the aim of reducing the impact of zoonoses on poor people and their livestock.

Remit

14. Proposals must be within participating Research Councils' remit, of relevance to development and in scope with the main aims of the ZELS programme (see 8-10 above) and cover one or more of the following areas:
 - a) Zoonotic infections: including endemic, and new and (re)-emerging zoonotic diseases caused by viruses, bacteria, fungi, protozoa and other parasites;
 - b) Reservoirs of disease: understanding the dynamics of infectious agents in livestock and wildlife populations, and ecological processes involved in their distribution, maintenance and abundance in environmental reservoirs;
 - c) Host/pathogen interactions: the biological context that involves understanding the biology of pathogens, their virulence mechanisms, the response elicited by the host when challenged with these pathogens, and the interactions between a pathogen and its host;
 - d) Tools and technology: development of tools and technologies for detection, identification, prevention, treatment or management of the disease in animals and humans;
 - e) Transmission pathways: interconnections between animal and human health, and the prevalence, processes and dynamics of multiple transmission pathways (e.g. livestock and

- human contact with wildlife, vectors, and zoonotic organisms in air, soil and water within the livestock system; within herd and between livestock species; and processes in the food chain from production through to consumption). This includes the exposure and risks to neighbours, potential consumers and traders;
- f) Livestock and food systems: the characteristics of the emerging livestock systems and options for managing risks, including (but not limited to) which species (and breeds) are kept, how they are managed and how and where the products are marketed and used (for home consumption or trading), and overall robustness of systems in specific socio-economic contexts;
 - g) Impacts of disease: the impacts and burden of zoonotic diseases on the health status of the livestock keepers, their communities and their livestock and people wherever there is a threat of zoonotic disease spreading and taking on wider endemic or epidemic/pandemic forms;
 - h) Environmental context: the broader environmental context and on-going environmental change (e.g. global and regional climate change, land use and habitat change) and possible trajectories of disease dynamics within which the systems are located, including (but not limited to) the interactions between livestock and resources such as feed and water and their interactions with wildlife species or vectors of disease, and risks posed by the local environment;
 - i) Institutional context: the “institutional” context (national and international, formal and informal) including (but not limited to) policies relating to animal and human health, and the avoidance and management of outbreaks; and issues of politics and power that shape the relations between government officials (such as public health officials), and others in positions of authority or respect likely to provide advice, (such as veterinary and medical professionals) and other stakeholders such as feed suppliers and traders;
 - j) Socio-economic context: The socio-economic context, including absolute and relative levels of poverty within particular communities, the social and economic structures and practices that shape emerging livestock systems and people’s interactions with livestock and wildlife, the prevalent cultures, norms and belief systems which impact upon people’s behaviour under differing circumstances and contexts This will also include how people evaluate risk and take decisions under conditions of uncertainty, and what are the informal sources of information and advice to which people turn including forms of indigenous knowledge and local culture.

Eligibility

15. Definitions:

- a. Administrative Lead (person). This person
 - (i) must be a PI or Co-I on a successful ZELS RPG.
 - (ii) will be identified as a PI on the ZELS-AS application form.
 - (iii) will be responsible for submitting the proposal and must be employed by an eligible research organisation.
- b. Administrative Lead (organisation). This organisation
 - (i) must be eligible to apply for funding from any participating Research Councils’ (RCs) managed mode calls. Please refer to <http://www.rcuk.ac.uk/funding/eligibilityforrcs/> for details.
 - (ii) will be the recipient of the award, and will be responsible for its management. It will be accountable for the finances in accordance with the terms and conditions of the award.
- c. Training Lead (person). This person
 - (i) could be either a UK-based PI or Co-I, or a Co-I based in a developing country institution, on a successful RPG.

16. This opportunity is restricted to consortia of organisations led by successful ZELS RPG grant holders (PIs or Co-Is). The maximum number of ZELS-AS applications submitted will reflect the number of successful RPG grants. There may only be one ZEL-AS submission (as administrative or training lead) per successful RPG. However, RPG grant holders may be involved in more than one ZELS-AS application.
17. The formation of inter-RPG/TSPG ZELS-AS consortia is expected and highly encouraged. All members of ZELS-AS consortia must be on a successful RPG or TSPG.
18. ZELS-AS consortia must include an RC eligible UK organisation on a successful RPG who leads on the administration of the award (Administrative Lead, see 15a-b, above), but the Training Lead may be either an individual from a developing country institution or UK institution on a successful RPG (see 15c, above).
19. ZELS-AS consortia must include at least one accredited Higher Education PhD award-making body in the UK and at least one research organisation from a developing country with the appropriate academic environment, research facilities and infrastructure to host students for a minimum of 50% of their doctorate.
20. Funding is available for a single intake of 15 studentships. Studentships will begin in the academic year 2015-16.
21. Students will be managed as a single cohort. The student cohort will include 50% nationals of a developing country and the remainder must meet [RCUK standard eligibility criteria](#).
22. Each student should have a minimum of two supervisors, including one in the UK and one in a developing country. Each student is expected to spend a minimum of 50% of their time in the developing country.
23. All students must be registered at an accredited Higher Education PhD award making body in the UK and can be co-registered at a developing country institution which is part of the ZELS-AS consortium. However, degrees will be awarded by the accredited Higher Education PhD award making body in the UK.
24. Students will be expected to attend the ZELS annual workshops (more information will be supplied in due course).
25. Please note: the eligibility of developing country students under this Call does not extend to other Research Council funded studentships. This eligibility has been made available through funding from DFID.

Partnerships

26. An expected key outcome of the ZELS-AS is to create a concentrated focus for doctoral training in ZELS related research, building a strong and active cohort of students who are able, and encouraged, to work together. The training environment should provide students with excellent opportunities to gain transferrable skills and to conduct original and scientifically excellent research.
27. Each ZELS-AS must be able to offer training in a range of disciplines within the RCs' remit and relevant to the ZELS Programme. Strong proposals should evidence a track record of collaborative working.
28. ZELS –AS consortia are encouraged to include successful ZELS TSPGs, if appropriate.
29. Research Organisations hosting ZELS-AS are encouraged to identify, in the proposal, additional studentships funded from outside this programme, to augment the ZELS-AS cohort.

Funding

30. Indicative funding per notional doctoral studentship is £100,000. This must cover the Research Training Support Grant (RTSG), fees and at least the minimum RCs' student stipend.

31. The ZELS-AS will have flexibility in how they use the funding (subject to the normal [training grant terms and conditions](#)), as long as the minimum notional numbers of students are supported (i.e. 15). The funding is for the training of PhD studentships.
32. Students must receive the minimum Research Council stipend level for the duration of their studentship. We would encourage this figure to be increased from other funding sources.
33. ZELS-AS funding cannot be used to cover the difference between home and overseas student fee rates, as per the [Conditions of Research Council Training Grants](#). The difference in fees must therefore be waived by the appropriate ZELS-AS consortium Higher Education Institution(s).

Management

34. The ZELS-AS will need to have strong leadership and management to maximise the opportunities for the cohort. The ZELS-AS should have a steering committee. The steering committee should be comprised of all the ZELS-AS consortium members. It should have overall responsibility for:
 - the effective governance of the ZELS-AS
 - its relationship with the ZELS funders and ZELS Knowledge Broker
 - the provision of a strategic needs framework to aid the prioritisation and development of PhD projects student recruitment criteria (which must comply with the Conditions of Research Council Training Grants (<http://www.rcuk.ac.uk/RCUK-prod/assets/documents/documents/TermsConditionsTrainingGrants.pdf>), and the optimisation of student training and development.
35. The ZELS-AS will be able to demonstrate that robust and transparent governance arrangements are in place, which may include formal partnership agreements, communication plans and systems for monitoring the overall progress and success of the ZELS-AS. Students should have the opportunity to be involved in the management/running of activities of the ZELS-AS.

Reporting

36. There will be mandatory annual reporting requirements for the ZELS-AS as well as the standard studentships information captured through the Je-S Studentship Details Portal (SDP). The funders reserve the right to discuss, adjust or terminate ZELS-AS awards based on the information provided. Indicative headings for the reporting requirements include:
 - Fostering/Capitalising on opportunities for inter-disciplinary working
 - Networking within and if applicable between cohorts
 - Individual and cohort progress
 - Opportunities and issues in differing environments

Application Process

37. Proposals should be submitted to stag@nerc.ac.uk by 16.00 BST on 26 June 2014.
38. All proposals must be submitted using the 'Case for Support' proforma provided on the NERC website. Guidance for completion of the 'Case for Support' proforma is provided in paragraphs 39 to 45 below.

Guidance for Completion of the 'Case for Support' Proforma

39. The case for support must be contained within 12 sides of A4, using the proforma provided on the NERC website. Applications must be submitted in Arial font with a minimum size of 11 pt in their native file format (MS-Word) as they will be subject to electronic processing. Applicants will need to provide details under the following headings:
 - i. Research Excellence

- ii. Training Excellence
- iii. International Experience
- iv. Inter-disciplinarity
- v. Consortium Operational Management

40. No other attachments will be accepted. Wording about links to websites will be ignored.
41. Research Excellence: describe the research excellence setting within the ZELS-AS Consortium and how this relates to the main aims of the ZELS programme (**maximum 3 sides of A4**).
42. Training Excellence: describe how the training experience will ensure that students are managed as a cohesive group and acquire excellent research and transferrable skills (**maximum 3 sides of A4**).
43. International Experience: provide details of how the ZELS-AS consortium will ensure that the student experience will be enriched by working in different environments. Please also provide evidence of your track record of working internationally and how you will promote international working within the ZELS-AS consortium (**maximum 2 sides of A4**).
44. Inter-disciplinarity: provide details of how the ZELS-AS consortium will ensure that students are embedded in inter-disciplinary training settings to enrich the student experience and to encourage knowledge-sharing and interconnectivity, which benefits research within the scope of the ZELS programme (**maximum 2 sides of A4**).
45. Consortium Operational Management: describe how the leadership and management of the ZELS-AS Consortium will enable it to deliver excellent training in line with the ZELS programme aims (**maximum 2 sides of A4**).

Assessment Process

46. Proposals will be assessed by a panel consisting of experts in the field of zoonotic diseases, supplemented by some member of the Training Advisory Group or similar from all the participating funders.
47. Applicants will be invited to make a presentation and answer questions at the assessment panel meeting to assist the assessment process. NERC will try to provide early notice of an invitation to attend, but applicants should note that the panel meeting is currently scheduled for September 2014.
48. The assessment criteria used to judge proposals will be as follows:

Assessment Criterion	Key aspects for an outstanding ZELS-AS proposal	Factors and evidence that might be discussed
1. Research Excellence	<p>The training and training environment must include scientifically excellent, ambitious, timely and novel research within the remit of the participating Research Councils and within the scope of the ZELS programme.</p> <p>Critical mass of relevant researchers/teams/projects to allow students to be supported effectively and sufficiently exposed to excellent research</p>	<p>Number of active Research Council funded research projects at host organisations in the remit of the call.</p> <p>Institutional commitment to research excellence within the remit of the call.</p> <p>RAE 2008 profiles (where relevant).</p>

Assessment Criterion	Key aspects for an outstanding ZELS-AS proposal	Factors and evidence that might be discussed
	and researchers.	
2. Training Excellence	<p>Students are part of an active community and managed as a cohort. They are able, and encouraged, to work together.</p> <p>Excellent scientific training and transferrable/professional skills development opportunities.</p> <p>Challenging and relevant PhD projects.</p> <p>Timely access to world-class research facilities, direct experience of cutting-edge techniques, technologies, and up to date methodologies.</p> <p>End user engagement: students will gain value from interaction with end-users in industry, government and civil society, including charities and NGOs, and leave equipped with skills for the public, private or research sectors.</p> <p>Excellent training and support for supervisors.</p>	<p>Students have access to, and are encouraged by peer to peer learning and support.</p> <p>Mechanisms for supervision and monitoring of both student and supervisor.</p> <p>Integration of students into the relevant teams/projects/departments/schools.</p> <p>How generalist and specialist development needs of individual students will be identified and delivered.</p> <p>The personal/professional/career learning and development that students will receive.</p> <p>The collaborative opportunities that may include internships, industrial placements, and co-supervisory arrangements.</p> <p>Completion rates, publication and first destination data for students.</p> <p>Employability of students upon completion.</p> <p>Mechanisms to ensure the development of independent researchers and world-leading scientists.</p> <p>Leveraged funding and in-kind support.</p> <p>Plans for engaging with end-users.</p>
3. International Experience	The student is embedded in the training processes of the UK and the developing country institutions, enriching their experience.	<p>Consortia members have a track record of working internationally.</p> <p>Evidence of existing collaborations between the UK and developing country consortia members (e.g. co-</p>

Assessment Criterion	Key aspects for an outstanding ZELS-AS proposal	Factors and evidence that might be discussed
		<p>authored papers, conference presentations).</p> <p>Mechanisms to promote international working via, for example, conferences.</p>
4. Inter-disciplinarity	<p>Training is embedded in inter-disciplinary training settings to enrich the student experience and to encourage the knowledge-sharing and interconnectivity, which benefits research within the field of zoonotic diseases. This does not mean that individual PhD topics are required to be inter-disciplinary.</p>	<p>How students will be made aware of the context of their research.</p> <p>Supervisory or wider advisory team engagement in research outside the relevant discipline(s).</p> <p>Ability to expose students to different disciplines via, for example:</p> <ul style="list-style-type: none"> i. Establishing cohorts beyond the funded students by using the ZELS-AS as a magnet/nucleus for training activities and investment ii. Placing students within interdisciplinary research teams iii. Giving students the opportunity to attend transferrable skills training programmes at which students from different disciplines come together iv. Offering rotations across different disciplines within the first few months of training, where appropriate v. Networking opportunities including inter-disciplinary student conferences or poster competitions vi. Seminars open to students across different disciplines.
5. Consortium Operational	Robust and transparent governance arrangements.	Systems and processes for assessing the suitability of supervisors and

Assessment Criterion	Key aspects for an outstanding ZELS-AS proposal	Factors and evidence that might be discussed
Management	<p>Mechanism for planning, managing and monitoring training.</p> <p>Mechanism for managing partnerships between or within organisations.</p> <p>Mechanism for aligning and agreeing ways of working and sharing resources between different organisations.</p>	<p>projects.</p> <p>Competitive mechanisms for awarding studentships.</p> <p>Processes for student recruitment, induction, progression, monitoring and submission.</p> <p>Arrangements for returning accurate and timely data on studentships to the Studentship Data Portal (SDP).</p> <p>Mechanisms for improving and maintaining submission rates.</p> <p>Robust quality-assurance procedures and structures.</p> <p>Arrangements in place for management of data generated by studentship projects.</p>

49. Following the assessment panel meeting feedback for unsuccessful proposals will be available upon request.

Timetable

50. Timetable:

14 April 2014	Announcement of Opportunity
26 June 2014	Closing date for proposals
September 2014	Assessment panel meeting (including applicant attendance)
Late September 2014	Decision communicated to applications
October 2015	All ZELS-AS studentships commence

51. For further information please contact:

- Application process queries: Katie Tearall, kattea@nerc.ac.uk, +44 1793 411629.
- Eligibility queries: Amanda Read, amanda.read@bbsrc.ac.uk, +44 1793 414665.