

Applying for research funding

4 a Read the following extract from a website and then, in pairs, answer the questions below.

- 1 Can an organisation apply for this scholarship?
- 2 Would you be interested in applying for SARF? Why / why not?
- 3 What information might you need to include on your application form?
- 4 What are the advantages of attracting scientists 'with future potential for leadership in their field' to a country?

b Eriko has decided to apply to SARF and has downloaded an application form. Look at the list of sections on the form (1–10) and match each one to Eriko's notes on the information she needs to provide (a–j).

About

The Sheridan Australian Research Fellowship (SARF) aims to develop science in Australia by attracting outstanding scientists in their field to continue their research in an Australian university or research institution. SARF fellowships are awarded to individual scientists with future potential for leadership in their field. Successful applicants receive a 5-year grant covering salary, travel and relocation costs.

Sheridan Australian Research Fellowship

APPLICATION FORM

- 1 APPLICANT
- 2 CURRENT APPOINTMENT AND ADDRESS
- 3 LOCATION OF PROPOSED STUDY
- 4 SPONSOR'S RECOMMENDATION
- 5 DEPARTMENTAL SUPPORT
- 6 PROJECT TITLE
- 7 PROJECT SUMMARY
- 8 DETAILS OF PROPOSED RESEARCH
- 9 BUDGET
- 10 NOMINATED REFEREE WITH PERSONAL KNOWLEDGE OF APPLICANT

- a an explanation of how I'll do the research and why it is important
- b a short description of what I'll research
- c a statement from a senior researcher explaining why I'm a suitable applicant
- d how much I plan to spend on my research
- e the job I do now
- f the name of someone to support my application
- g what I'll call my research
- h permission from my head of faculty to use his/her resources
- i where I plan to study
- j my personal info

5 a Section 7 of the form asks applicants to write a project summary of their research proposal. Think about a research project in your area. In pairs, take turns to summarise the project following the instructions (1–6) below.

- 1 State the aims of your research
- 2 Define what the problem is
- 3 Explain why your topic is worth researching
- 4 Say what the expected outcomes of the research are
- 5 Outline the procedures you will follow
- 6 Outline how you will limit your investigation

b Read Eriko's completed project summary on page 9. Then say what you think the commercial applications of Eriko's research might be.



7 PROJECT SUMMARY

Provide a brief summary of aims, significance and expected outcomes of the research plan

A 3-D odour-compass for odour-detecting robots

Odour-sensing robots offer many benefits over the current use of animals in similar roles, including safety, efficiency and durability. [A] However, the robots which have been developed to date are limited by the fact that they can only accurately detect and navigate towards odour plumes if they are within direct 'sight' of the chemical source. Clearly, in real world situations, obstacles may well impede the robot's detection ability, and at present, odour-sensing robots are therefore only of limited use. [B] The proposed research will concentrate on developing a robot which is able to gather readings in three dimensions and therefore overcome the limitations of current models in odour-detection. [C] This technology will make robots a more effective substitute for animals.

[D] This research aims to develop existing robotic technology to create a three-dimensional (3-D) odour compass to be used as a navigation tool in searching for an odour source. [E] This will then be tested experimentally in simulated environments where wind direction is not stable or where obstacles interfere with odour distribution. A second stage in the research will be to develop the robot's environmental sensors, thus allowing it to safely negotiate the terrain to reach the source of the odour. [F] This should produce a robot which is able to both detect and move to the source of an odour, even on difficult terrain.

- c Match each highlighted section in the summary (A–F) to the correct function (1–6) from the list in Exercise 5a.
- d Look at the highlighted sections A–F again. Underline the words that you could use in your own project summary. Make notes like the following example.

However, to date and limited to define the problem (A).

- 6 a Complete the project summary by another researcher below using the correct word or phrase from the box.

aims to however the initial phase the proposed research the study will indicate

Consumer interest in wines produced in organic vineyards has increased significantly in the last few years. (1) _____, to date it is unclear whether these production methods actually improve soil or grape quality. (2) _____ will be the first phase of a long-term study on a New Zealand vineyard. These results (3) _____ whether methods of viticulture improve grape quality.

The research (4) _____ investigate the effects of organic agriculture on soil and grape quality. (5) _____ will consist of two treatments, organic and conventional (the control), each replicated four times in a randomised, complete block design. All organic practices will follow the standards set out by the Food Standards Australia New Zealand (FSANZ).

(6) _____ will assess soil quality using physical, chemical and biological indicators over six years. The next phase will then assess the physiology of the vines.

- b Write a short project summary of about 150 words for the research you discussed in Exercise 5a above. Use the phrases you noted in Exercises 5d and 6a.