

Make a
difference
with a career in biology



Animals

Whether it's the animals we use for food or the pets in our home, animals have a huge impact on our lives.

Biologists help by:

- **studying animal behaviour in the wild and planning ways to conserve endangered animal species around the world**
- **developing drugs and treatments to keep our pets healthy**
- **monitoring the animals we rely on for food**
- **researching diseases that can be passed from animals to humans**

Biology careers involving animals are varied and they take place in many different environments. You might study albatross at the Antarctic, or work in a lab using high-tech equipment to track the spread of disease in livestock.

Follow a career in biology and you can make a difference.

You could improve the well-being of domestic animals and expand our understanding of animals in the wild.

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Food

The world's population is growing rapidly and so is the demand for food. Less land will be available to produce food and climate change is likely to affect where crops can grow. This means there will be a shortage of food.

Biologists are helping to tackle the problem by developing crops that can cope with difficult growing conditions.

Crops can be genetically modified to have important properties like:

- **resistance to pests**
- **increased nutritional value**
- **allergen free**
- **resistance to drought**

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**You could help to
feed the world.**

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Sport

Athletes strive to improve their performance to meet their full potential.

Biologists help them achieve this by:

- measuring their fitness levels
- planning a nutritional diet
- highlighting strengths and weaknesses
- developing personalised training programmes

Exercise keeps our bodies healthy. It can also be used to prevent disease, like obesity and osteoporosis, and help patients recover from illnesses like cancer and heart attacks.

Biologists can design exercise 'prescriptions' and monitor patients to help their recovery.

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You could play a vital role in patient recovery or help to train an Olympic athlete.



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Sustainability

We make our land work hard for us, to feed us and provide us with water and places to live. Often we have to restore habitats so that other animals and plants can return to the land we use.

Biologists help by:

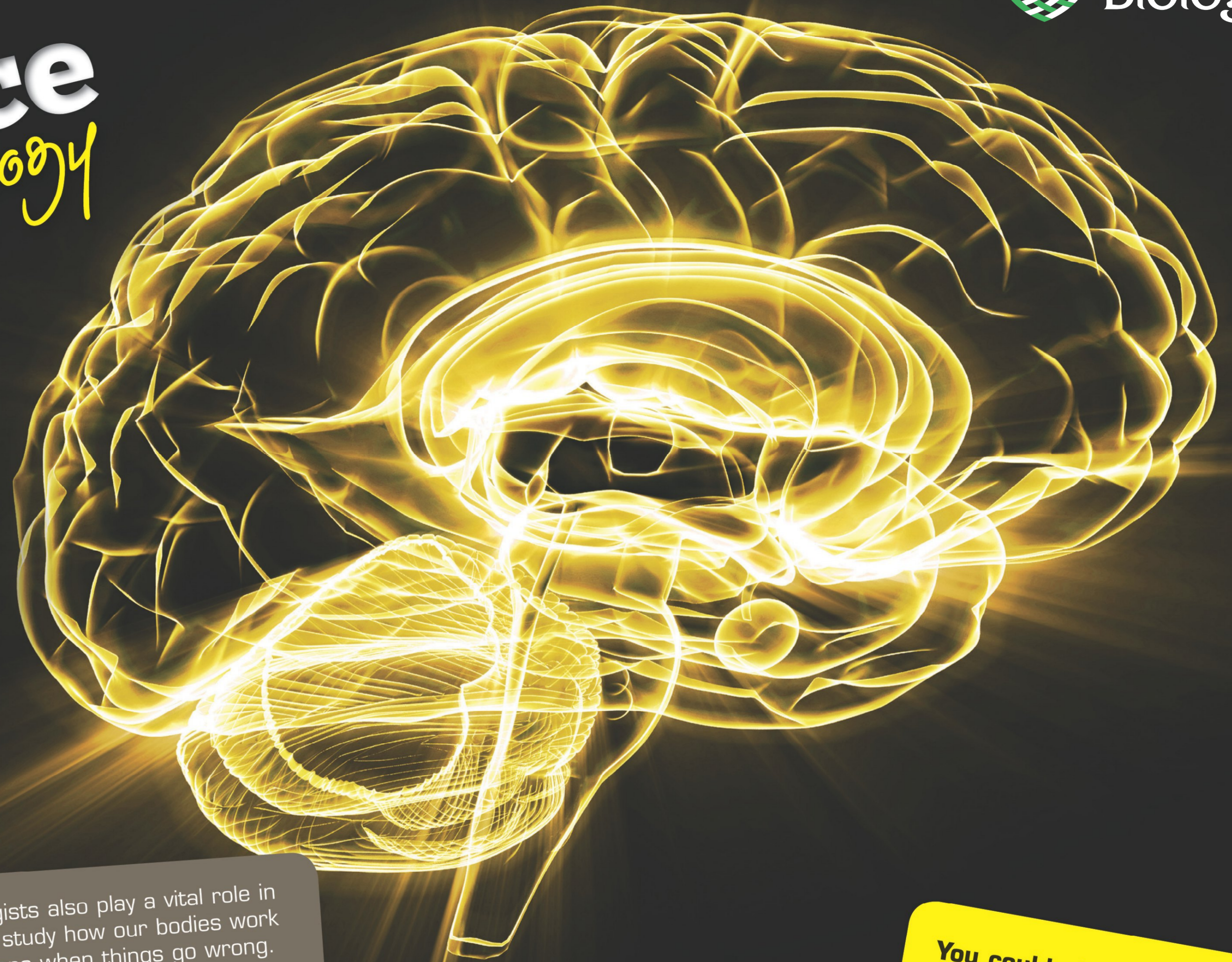
- analysing soil, water and air for chemical pollution
- finding ways to clean up pollution
- identifying, recording and monitoring the plants and animals that share the land we use

Biologists find ways of helping humans to live sustainably.

Follow a career in biology and you can make a difference.

You could protect our plants and animals and the habitat they live in.

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Medicine

When we are ill the correct diagnosis is vital in planning the medical treatment needed to cure us.

Clinical biologists work in hospitals helping to find out what is wrong. They:

- analyse blood, DNA, tissue or bodily fluids
- interpret test results
- diagnose diseases
- advise on treatments

Research biologists also play a vital role in medicine. They study how our bodies work and what happens when things go wrong. Understanding what causes diseases allows them to develop new treatments and diagnostic techniques.

Follow a career in biology and **you** can make a difference.

You could play a key part in diagnosing, treating and curing diseases.

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The Future

Biologists have a vital role to play in exciting developments of the future. Many revolutionary new technologies are closer than you think.

These include:

- analysing your genome and developing personalised medicines
- developing biofuel technologies to help replace fossil fuels
- growing organs from stem cells for transplantation
- finding new ways to clean up pollution

Biologists work at the cutting edge, to produce new and innovative technologies.

Follow a career in biology and **you** can make a difference.

You could tackle some of the big problems facing our society and help to improve our quality of life for the future.