

# THE WORLD OF OPHIOLOGISTS

Ophiology is the study of snakes. Ophiology is a branch of herpetology, the study of reptiles and amphibians. Herpetologists may begin their scientific career studying all reptiles and amphibians, then decide to focus their study on snakes.

*Ophiologist*  
(oh-FEE-oh-luh-jist)



*Ophiologists' tools usually include **GPS** for getting around, **phones** for staying in touch with team members, and snake **hooks**, **tongs**, and **secure bags** for safely handling and collecting snakes.*

# WHAT DO OPHIOLOGISTS DO?

An ophiologist's work is really interesting because there is always a chance of making new discoveries.



## LAB WORK

Ophiologists help towards the creation of medicine that uses snake venom. They are also involved in the process of making anti-venom medication, which is given to people who've been bitten by poisonous snakes. Venom is also collected for medical research, and to study the biology of snakes themselves. As with most scientist research, it is often shared with other scientists and scientific papers are written and published to advance medical sciences.

## FIELDWORK

Snakes are not easy to study in their natural habitats, but it is necessary for ophiologists to set up field studies for their research projects.

Sometimes this means travelling to remote parts of the world and employing local people to help them understand local snakes' habits.

Recent technology is making it easier for ophiologists to track snakes, such as a device that is gently placed around their necks to measure vibration, movement, and speed.



## WHO DO OPHIOLOGISTS WORK FOR?

Many people keep snakes as pets. Animal welfare charities around the world will often employ ophiologists for advice, or even take care of snakes themselves if their welfare is at risk.

Ophiologists may also decide to work in zoos, join research projects that are often funded by governments, or work in education, teaching and giving lectures to students. There are also opportunities to work for nature magazines, in radio, and on TV.

# FAMOUS DISCOVERIES

Ophiologists have made so many amazing discoveries that have changed our understanding of snakes. Here's just a few!



## FANTASTIC FOSSILS

Sometimes new fossil finds are the most interesting discoveries! A recent find in Wyoming, USA uncovered the fossils of four species of python that lived 34 million years ago, all curled up together.

## ANTI-VENOM

Doctor Albert Calmette was the first person to create an anti-venom serum, a breakthrough that has gone on to provide treatment for snakebites worldwide, saving many lives.



## VENOM MEDICINE

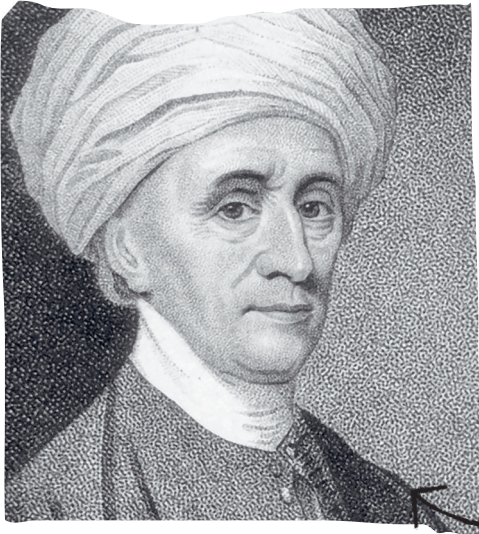
From the venom that kills to medicine that saves lives, it seems difficult to imagine that researching deadly venom can lead to life-saving medicines. By studying the effects of snake venom on victims, scientists have developed medicines that have transformed the treatment of heart disease in humans.

Ophiologists are making discoveries all the time; who knows what they might discover next!



# FAMOUS OPHIOLOGISTS

Ophiology has changed greatly over the years and many scientists have made a difference to the field with their discoveries. Here's just a few of the most important.



## PATRICK RUSSEL

Patrick Russel, nicknamed the “Father of Indian Ophiology”, was a herpetologist who studied the snakes of India. While stationed in India, Russell became fascinated with the country’s variety of species. For many years, he tracked the habits, diet, and habitats of many species, focusing mainly on cobras and vipers. He paved the way for future herpetologists research.

## GRACE OLIVE WILEY

Grace Olive Wiley was one of the first female herpetologists, best known for her work with venomous snakes. She focused her research on observing and collecting rattlesnakes, keeping many in her house. She claimed that venomous snake can be harmless if properly trained, often leaving cages open to allow snakes to roam around while she was working!



## MARK O'SHEA

Mark O'Shea is a herpetologist that focuses his research on venomous snakes. He has produced over 40 natural history documentary programmes. His work includes the conservation of snakes and highlighting the issues of remote and rural snake bite victims.

**These are just a few of the many ophiologists who have made a huge difference to the science.**

Copyright © 2024 Hungry Tomato Ltd, Truro, Cornwall, TR1 1QH

Picture credits (all image are also on the website): (t = top, b = bottom, m = middle, l = left, r = right).

Shutterstock: Asian Isolated 3bl; chemical industry 3ml; Elnur 2tl; Nawal Karimi 2mr; William Cushman 3tl. Wikipedia: By Papblak - Own work, CC BY-SA 4.0 4bl (Mark O'shea); By Unknown - Original publication: Unknown 4mr (Grace Olive Wiley); By Engraved by Ridley - <http://ihm.nlm.nih.gov/images/B22599>, Public Domain 4tl (Patrick Russel).