

YOUNG SCIENCE

Communicators Competition

OPEN CATEGORY

WINNER

FINDING FISH

Molly Czachur

S FACULTY OF SCIENCE

I'm a **marine biologist**.

I ask questions about the oceans...

...such as "**Which fish live in South Africa?**".

To find the answer, I could search for all the fish, but I'd need to go scuba diving and fishing. It'd take a **long time** and be very **expensive**.

I probably still wouldn't find them all!

So instead, I look for the trails that the fish leave behind...

Fish leave a **trail of DNA** behind them when they swim.

It's similar to following their footprints.

I collect seawater which contains the DNA trails of lots of these fishes.

One bottle of seawater can contain the DNA of hundreds of fishes!

I take the DNA out of the water, and work out which types of fish the DNA has come from.

It's like completing a puzzle, and working out which DNA belongs to who.

It is important that we do this so we can work out where the different fishes live, even the ones that would be hard to find. The more we can learn about fishes, the more we can do to **help them** when they are being threatened by **climate change** and **overfishing**.

By Molly Czachur

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NRF National Research Foundation

About Molly



Molly is a marine biologist and loves to ask (and answer) questions about the oceans. She is currently doing her doctoral research at Stellenbosch University, and has also worked in Kenya, Germany and the UK.

“The oceans are very exciting to me, but there is also still a lot to learn, so I love to share my enthusiasm for science with as many different people as possible, hoping that you will all join in with the fun!”

Visit www.zoologymolly.com to find out more about her exciting work.

With this competition Molly wanted to answer the question ‘what do you do?’. She spends time on South African beaches collecting samples, but spends most of her time inside laboratories. She says “There is never a short answer to ‘what do you do?’, so I thought that the quickest way to answer this question was with a cartoon.”

“By sharing the work that us scientists do, I hope that people of all backgrounds can feel included in the work that we are doing, and feel inspired to interact with the oceans themselves.”

@zoologymolly

