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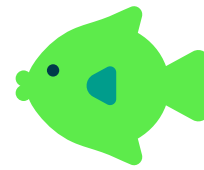
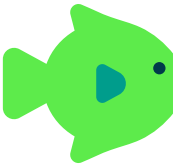
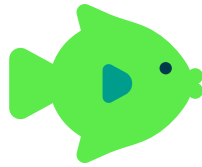
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#TheClimateConnection

# Green careers guide

Luca Mirimin  
Ireland



# Luca Mirimin Ireland



## COP26 Green Careers

### Luca Bio

Luca has lived, studied and worked in Italy, the UK, South Africa and Ireland, where he is now a lecturer in Aquatic Ecology at the Galway-Mayo Institute of Technology. Luca's research uses DNA to study life in water, ranging from sea squirts to whales.

### Luca Videos

<https://www.youtube.com/watch?v=vblc6A-fJOA>

[https://www.youtube.com/watch?v=uO\\_AQrxJw4M](https://www.youtube.com/watch?v=uO_AQrxJw4M)



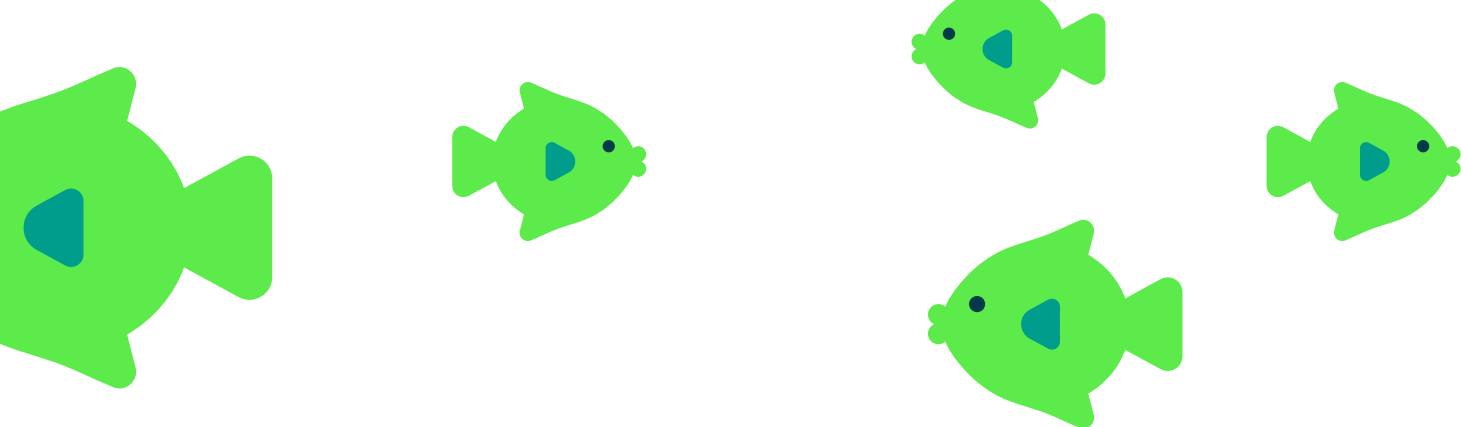
## What did you study?

I grew up in Italy where I completed a BSc in Natural Sciences, which is comparable to many international undenominated science or common science programmes. Nonetheless, my final year BSc thesis project was on population genetics of land tortoises, and that is where my interest in genetics began as well as my career as a geneticist started.

## What inspired you to study your subject at university and to work in the green industries?

I have always been feeling intrigued by the natural world and in particular plants and animals. I suppose this partly comes from growing up in a small farm environment in a rural area in the northeast of Italy. During my educational journey (from primary to tertiary education) I became increasingly aware of the impact that human activities have on our planet and I could see such impacts in the degradation of the land and water bodies near my hometown. For instance, I remember the sound of frogs during the warm Summer nights, which was commonplace when I was a kid. The Summer nights back home are now silent because the quality of water in rivers has been affected by pollution and water sensitive animal like frogs are the first to disappear when this happens.





## Why does climate change matter?

It matters because it affects not just animals and plants but also our very species (humans), whose lifestyle and wellbeing depend on living in a healthy environment. Even after hearing people questioning whether human activities do have a significant impact on climate, I still think that, even with a lack of scientific evidence, a cautionary approach is a no brainer...why take any chance when what is at stake is the future of our own species?

## How did your studies help you get into the career you're in today?

My studies helped me in two main ways: first they provided the necessary qualification to become an academic (such as a PhD); and second (by carrying out my postgraduate studies abroad) they allowed me to travel and be exposed to a variety of cultures and professional environments, which has opened my mind to alternative ways of living and working with people.

## What other experiences and support have you had along the way?

I have studied, lived and worked in Italy, UK, South Africa and Ireland. I mostly moved around the world thanks to study or job opportunities and during my travels I have met many people, who in time have become friends, colleagues and family. As for support, I am infinitely grateful to my family who has encouraged and supported me throughout my experiences even if they meant that we were not going to see each other very often.

## What do you do now – what does your role involve?

I am a lecturer in aquatic ecology and a researcher in conservation genetics and applied molecular biology. In other words, I teach many subjects related to water and what lives in it, and I lead research projects where my team uses genetic data to study a wide range of organisms that occur in rivers, lakes and the ocean. My main roles involve teaching students at all levels, as well as managing and coordinating research projects.

## What exciting projects have you been involved in?

In recent years I have been working with a novel and fascinating approach: environmental DNA. This approach is based on the principle that all living organisms (including ourselves) release cells and unique genetic material in our surrounding environment, where it will persist for some time. I am involved in a number of projects where we are developing protocols to detect such DNA signals from an extraordinary range of species and environments, including ice age relict fish populations in freshwater lakes and whales' DNA from the depths of the ocean. This work has the potential to revolutionize the way we keep track of changes of biodiversity on the planet and how it may be affected by climate change.

## Do you have any tips for people looking to pursue a career in your sector?

Travel and talk to as many people as you can so you can find a job that you are really interested in; and most of all don't be afraid of the unknown, but keep discovering what lies beyond.

