



Where I work Gregorio Iraola

Photographed for *Nature*
by Pablo Albarenga.

I'm in my wet lab at the Microbial Genomics Laboratory of the Pasteur Institute of Montevideo in Uruguay, which I set up in 2019. Most of my group's projects start here, but many move into bioinformatics research on the other side of the corridor, or through remote connections to computing systems elsewhere in the world – often at the Wellcome Sanger Institute in Hinxton, UK, where I'm also affiliated.

One long-term research goal is to better understand the gut microbiome – the composition and balance of bacteria in the gut – and how it varies across populations, to help treat many conditions. It's especially important for Latin American countries, because existing human-microbiome databases come from wealthier countries – in North America, Europe and China, especially – where much of the sampling has been done. This leads to bias. You can't make reliable medical decisions on gut health for a Latin American person with European data. Latin America has some of the highest obesity rates in the world, so a better understanding might help policymakers.

I lead a consortium of scientists in Uruguay, Argentina, Chile, Bolivia, Brazil, Colombia, Ecuador, Mexico, Paraguay, Costa Rica, Peru and French Guiana. We gather data on microbiomes in these incredibly heterogeneous countries. I see it as a puzzle; we need to find pieces from across the region before we can put the picture together.

My long-term dream is to help other scientific communities (in Eastern Europe, southeast Asia or Africa, for example) to collect and analyse microbiome data, so that medical interventions make sense for local populations, diets and cultures.

Once I've done that, perhaps I can go back to cooking – one of my hobbies – or growing vegetables. My father is a farmer in Cardona in the southwest of Uruguay, and I visit often. It's satisfying doing worthwhile research that's specific to this continent.

Gregorio Iraola is head of the Microbial Genomics Laboratory at the Pasteur Institute of Montevideo in Uruguay, and a Wellcome Sanger Institute International Fellow.

Interview by Jack Leeming.