

FIRST PERSON

First person – Juan Martín D’Ambrosio

First Person is a series of interviews with the first authors of a selection of papers published in Journal of Cell Science, helping early-career researchers promote themselves alongside their papers. Juan Martín D’Ambrosio is first author on ‘Osh6 requires Ist2 for localization to the ER–PM contacts and efficient phosphatidylserine transport in budding yeast’, published in JCS. Juan Martín conducted the research described in this article while a postdoc in the lab of Alenka Copic at Institut Jacques Monod, Paris, France, investigating yeast and plant biology, with an interest in membrane contact sites, signal transduction, lipid transport proteins and phospholipase C.

How would you explain the main findings of your paper in lay terms?

This paper is on lipid transport. Lipids are molecules that cannot be dissolved in water. For example, when you add olive oil (a lipid) in a glass of water, it remains floating on the surface. Let’s say you want to transport some oil to the bottom of the glass, how would you do it? I’d say ‘one molecule at a time’. Something similar happens in living cells. There is a factory of lipids (endoplasmic reticulum, ER) and you need to transport them to different compartments inside the cell (e.g. plasma membrane). Since most of the cells are mostly composed of water these lipids can’t really travel by themselves, they need a ride! So, there are other kinds of molecules that work as molecular taxis. They pick lipids up from the ER and deliver them to different places (membranes). These taxis are called lipid transfer proteins, and how they work is what my study is about.

Were there any specific challenges associated with this project? If so, how did you overcome them?

I think the biggest challenge was moving from Argentina to France, from the plant science world to the yeast one, from lipid signaling to lipid transport. How did I overcome this? I think... with a little help from my friends! I was lucky to find good friends in Paris, from all around the world, living in a similar situation to mine. At the lab, I always had the support I needed, from the moment I arrived in Paris to today. Alenka (my boss, although she doesn’t like that word so much), trusted me and opened the doors of the lab. She introduced me to the world of yeast membrane contact sites and taught me, helped me and supported me whenever I needed it. Again, I think I was very lucky to meet them all.

When doing the research, did you have a particular result or ‘eureka’ moment that has stuck with you?

I think I remember many ‘fail’ results, but I guess you have to go through many of them before arriving at your ‘eureka’ one. So, I’m still waiting for that.

Have you had any significant mentors who have helped you beyond supervision in the lab? How was their guidance special?

It wouldn’t be fair to name just one of them. I’d say I had many of them while carrying out my PhD research in Argentina



Juan Martín D’Ambrosio

(people from IIB) and also here in Paris (Jackson and Leon’s Lab). Lab mates, postdocs and young researchers are always willing to help you and make everything a little bit easier while working.

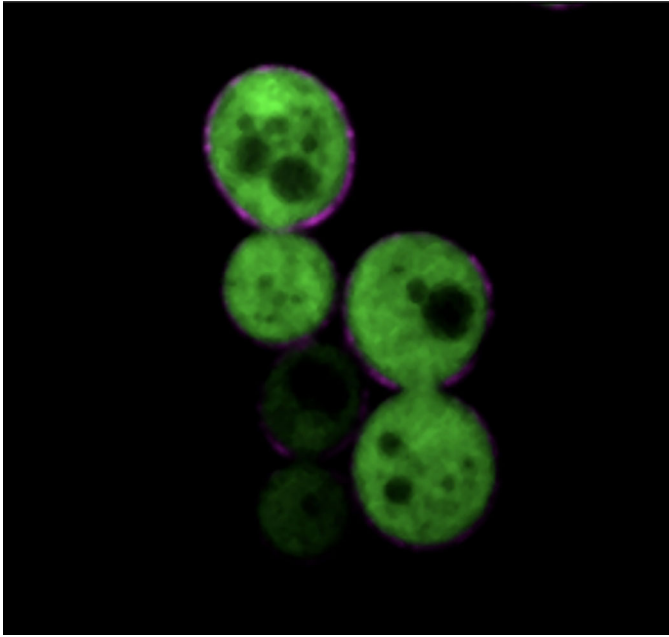
What motivated you to pursue a career in science, and what have been the most interesting moments on the path that led you to where you are now?

I think during my studies I learned what science actually is. I did not have an idea exactly how scientists work until I met them. Professors, postdoc and PhD students, during those years, have shown me how this job works and helped me to make my decisions. I remember the first time I attended a conference; the opening talk was given by Néstor Carrillo in plant molecular science. I loved what they were doing in his laboratory and I said to myself “I want to do that”. A very pleasing moment in my career was when I attended my first international conference in Iguazú (at the border between Argentina and Brazil). I presented my poster and many people came to discuss it with me, and showed interest in what I was doing in Argentina. Happily, a few months later I could visit them in their labs to do some experiments and publish a paper together. Last, but not least, it was also very gratifying the moment when, after three Skype interviews, I was selected to come to work in Paris. I guess it was the result of many years of study and hard work (sustained by the support of many people).

Who are your role models in science? Why?

I’d say [Bernardo Alberto] Houssay, who was the first Argentine recipient of the Nobel prize, and René Favaloro, an eminence as a vascular surgeon, educator and scientist, who was always

Juan Martín D’Ambrosio’s contact details: Institut Jacques Monod, 15 Rue Helene Briom, 75103, Paris, France.
E-mail: juan-martin.d-ambrosio@ijm.fr



Lipid transport in our system. Osh6 (a lipid transfer protein) swimming through the cytosol is shown in green; Ist2 a membrane protein that recruits Osh6 to the endoplasmic reticulum for picking lipids up and delivering them into the plasma membrane, and vice versa, is shown in pink.

committed to his people and particularly to those with low incomes. But I also want to mention those who make day-to-day science better for all of us, not only in its experimental sense but also in the human one. Those who take care of people in the lab, who think about you and your future, those who prioritize your personal well-being above a result, those who smile and make you enjoy science in all its aspects.

What's next for you?

I hope this step through the biology of membrane contacts site in yeast opens new doors in plant biology again. I am trying to apply what I learned here in Paris.

Tell us something interesting about yourself that wouldn't be on your CV

I have been told that I smile very often...

Reference

D'Ambrosio, J. M., Albanèse, V., Lipp, N.-F., Fleuriot, L., Debayle, D., Drin, G. and Čopič, A. (2020). Osh6 requires Ist2 for localization to the ER-PM contacts and efficient phosphatidylserine transport in budding yeast. *J. Cell Sci.* **133**, jcs243733. doi:10.1242/jcs.243733