© 2019. Published by The Company of Biologists Ltd | Journal of Cell Science (2019) 132, jcs235465. doi:10.1242/jcs.235465

FIRST PERSON

# First person – Javier Coy-Vergara

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. Javier Coy-Vergara is first author on 'A trap mutant reveals the physiological client spectrum of TRC40', published in JCS. Javier conducted the research described in this article while a PhD student in the laboratory of Blanche Schwappach at the Institute of Molecular Biology, Göttingen, Germany. He is now a Postdoc in the same lab where he continues to investigate the role of TRC40 in the proteostasis network of the cell.

Javier Coy-Vergara

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

The transmembrane recognition complex (TRC) pathway takes care of a set of proteins called tail-anchored proteins. This pathway makes sure that they arrive at the organelle where they will start their journey to their final destination. We developed a tool that enabled us to identify the tail-anchored proteins that can make use of the TRC pathway.

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

Tail-anchored proteins have been difficult to co-immunoprecipitate with the TRC subunit TRC40 owing to the hydrophobic nature of the interaction. This co-immunoprecipitation requires absence of detergent during the experiment, which, on the one hand, increases unspecific binding to the bait and, on the other hand, reduces the pool of tail-anchored proteins available, since membrane proteins cannot be solubilized. Finding the appropriate conditions was one of the biggest challenges of this publication.

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

I think one of the moment I remember the most is the first time I looked through the lenses of the confocal microscope and saw the staining of Stx5 in cells transfected with the TRC40 trap mutant. Stx5 always gives a very clear Golgi staining, but in those cells it was abnormally spread all over the cell, illuminating it. Back then, I had the feeling that we had something promising.

**Why did you choose Journal of Cell Science for your paper?**

Journal of Cell Science has always been a reference in cell biology. When writing my PhD thesis, I noticed that a big part of my bibliography was coming from this journal. Many of the relevant publications in my field and in cell biology were published by JCS. This journal is rigorous and ensures the good quality of its published manuscripts. That is why it was our first choice for submitting our manuscript.

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

Eric Arakel and Jhon Rivera-Monroy really helped me during my PhD time in the lab. They were very supportive and challenging, which allowed me to take my skills to the next level.

**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?**

Since I was a child, I have always been fascinated by different scientific phenomena. Science and South American literature were the only two things able to satiate my curiosity and fulfill me while looking for more. On top of that, science is a personal challenge, too, since the subject always forces you to push your limits. I am privileged that I could study and do a bachelor, master and PhD – others have not had the chance for several non-academic reasons. Therefore, I feel very lucky and have enjoyed every day doing what I love: science.

**Who are your role models in science? Why?**

Each one of the people involved in my learning process: Toñi and Ana, Carmen Arce, Marga Fernández, Paulina and Luismi, Jesús Salvador and María Salvador, Blanche Schwappach… I especially looked up to Paulina and Blanche. They are two incredible and inspiring women. They are empathetic and they have great personalities, while being humble. In addition, I look up to those scientists who, apart from in science, played a role in other fields or in human development, such as Wangari Maathai, Rita Levi-Montalcini, Denis Mukwege, Hawa Abdi, Pedro Alonso, etc.

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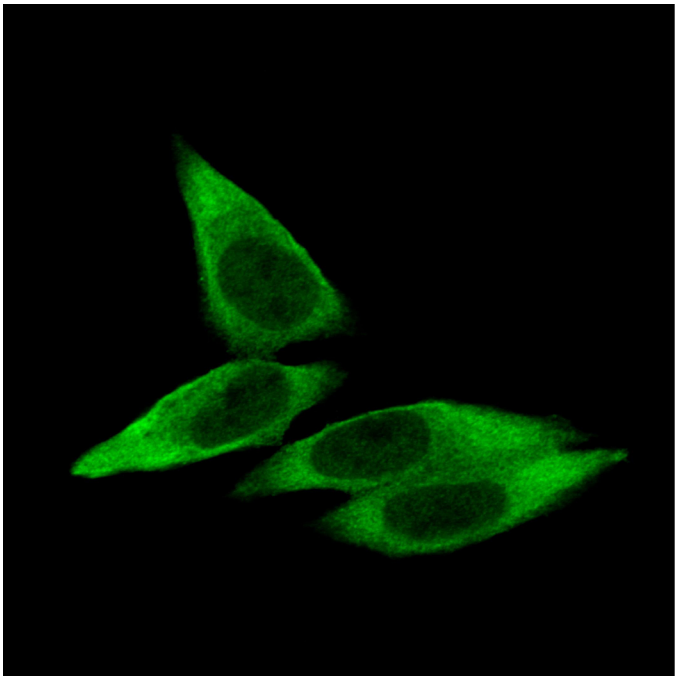

**Syntaxin-5 (Stx5) staining in HeLa cells transfected with the TRC40 trap mutant.** Indirect immunofluorescence image.

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

I am very curious and I like to read a lot. I love to get to know new things about cultures all over the world. I am passionate about anthropology, African and South American literature and global health.

#### Reference

**Coy-Vergara, J., Rivera-Monroy, J., Urlaub, H., Lenz, C. and Schwappach, B.** (2019). A trap mutant reveals the physiological client spectrum of TRC40. *J. Cell Sci.* **132**, 230094. doi:10.1242/jcs.230094