

# Newsletter October 2025



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here!



## Career Opportunities



### Bicentenary PhD studentship

Unravelling how macrophages control extracellular matrix deposition and circadian rhythms in fibrosis



### MRC CASE DTP

Towards a 3D model to study collagen regulation, fibrosis response, and drug repurposing



### Iberus Interdoc - PhD Position

The international MSCA-COFUND Iberus Interdoc program is looking for researchers to develop the doctoral thesis "Strategies for rationally designed cancer vaccines", supervised by Francisco Corzana López from University of La Rioja



### MRC DiMeN Doctoral Training Partnership

The intersection of mechanical signalling and the hypoxic response as a targetable signalling nexus in pancreatic cancer.

### Postdoctoral Researcher

Two-year appointment to investigate the molecular mechanisms of inherited cardiomyopathies and to evaluate potential therapeutic treatments. The project involves:

- Characterization of transgenic mouse models through molecular, histological, and functional analyses (ECG, echocardiography, MRI).
- Application of multi-omics approaches (transcriptomics, single-nucleus/cell profiling, proteomics) to uncover early disease mechanisms.

Anyone interested can send an email to [martina.calore@unipd.it](mailto:martina.calore@unipd.it) for further information or to submit an application (CV, brief cover letter, and contact details of two references).

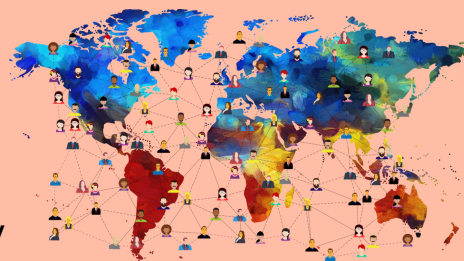
## LET'S MAP THE ECM RESEARCH WORLD TOGETHER!!!

The Meshwork is building a community-driven ECM Lab Repository to connect researchers for collaborations, advice & opportunities.

Add your lab, fill in missing info, or tag someone whose lab should be included!



Find Repository  
Here



## Next up...

## ECM proteases are coming to The Meshwork monthly seminars!!!

### KEYNOTE:

**DR. SALVATORE SANTAMARIA**

**November 25**



Join our mailing list  
to get all the updates!!!



## Our members' pen

Møbjerg, A., Steffen, D., Schjerling, P., Jakobsen, J. R., Jokipii-Utzon, A., Batiuk, M. Y., ... Yeung, C.-Y. C. (2025). **Spatially distinct ECM-producing fibroblasts and myonuclei orchestrate early adaptation to mechanical loading in the human muscle-tendon unit.** *AJP-Cell Physiology*. <http://doi.org/10.1152/ajpcell.00700.2025>

Piperigkou, Z., Mangani, S., Koletsis, N. E., Koutsakis, C., Mastronikolis, N. S., Franchi, M., & Karamanos, N. K. (2025). **Principal mechanisms of extracellular matrix-mediated cell-cell communication in physiological and tumor microenvironments.** *The FEBS Journal*. <http://doi.org/10.1111/febs.70207>

Kapustin, A. N., Tsakali, S. S., Whitehead, M., Chennell, G., Wu, M.-Y., Molenaar, C., ... Shanahan, C. M. (2025). **Matrix-associated extracellular vesicles modulate human smooth muscle cell adhesion and directionality by presenting collagen VI.** *eLife*. <http://doi.org/10.7554/elife.90375.3>

Sridhar, K. C., Mehl, J., Klingel, K., Thiele, M., Van Linthout, S., Tschöpe, C., ... Vogel, V. (2025). **Loss of fibronectin fiber tension is inherent to ECM remodeling in human myocarditis and post-inflammatory fibrosis.** *Matrix Biology Plus*. <http://doi.org/10.1016/j.mbplus.2025.100182>

Spyrou, A., Roy, A., Xiong, A., Kundu, S., Lu, X., Jansson, Y., ... Forsberg-Nilsson, K. (2025). **Heparan sulfate N-deacetylase/N-sulfotransferase-1 regulates glioblastoma cell migration and invasion.** *Matrix Biology*. <http://doi.org/10.1016/j.matbio.2025.08.003>

Milne, L. K., Ajayakumar, A. A. D., Holyland, I. L., Kotowska, A. M., Hogwood, J., Gray, E., ... Hook, A. L. (2026). **Validation of the use of ToF-SIMS for analysis of glycosaminoglycans.** *Carbohydrate Polymers*. <http://doi.org/10.1016/j.carbpol.2025.124415>

## European Elastin Meeting

18-21 August 2026  
Copenhagen, Denmark  
[www.eem2026.org](http://www.eem2026.org)



Conference flyers are used for informational purposes only and do not imply receiving any funding for advertising. Readers should check and verify deadlines, dates and any other information.



If your lab were haunted,  
who would the ghost be?



83% voted "the reagent that worked once and never again"  
and 17% said "the spirit of failed experiments past"

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Interview?  
Do you have a recent publication  
that you like to be highlighted in  
our network?  
Let us know!



**Paolo Rosales**



## Spotlight Researcher Interview



### Tell us a bit about yourself

My name is Paolo Rosales, and I am a 29-year-old native of Junín, Buenos Aires, Argentina. I hold a degree in Genetics from the National University of the Northwest of Buenos Aires (UNNOBA), and I am currently pursuing a PhD in Molecular Biology and Biotechnology, funded by the National Scientific and Technical Research Council (CONICET). I also teach at UNNOBA's High School.

When I am not in the lab or teaching, you will probably find me taking singing and dancing classes.



### Describe your academic journey so far, including any mobility or changes in research topic.

Since I began my journey in science, I have explored different research topics and gained experience in various areas, including lung, ovarian, and breast cancer as well as the detection of COVID-19 antibodies in patients using rapid tests. So far, I have been involved in several collaborations, not only among laboratories in Argentina but also with research groups in Europe (France and Germany).



### What can you tell us about your current research focus?

Our laboratory, known as the Tumor Microenvironment Laboratory, focuses on studying proteoglycans and glycosaminoglycans of the ECM and the associated cells within the tumor microenvironment, particularly in breast and colon cancer. My specific research interest lies in evaluating the role of the Heparanase-1/Syndecan-1 axis and Hyaluronan in breast cancer, and its association with the plasticity of tumor-associated macrophages (TAMs). This approach aims to provide insights into whether this axis could be considered a potential therapeutic target for this type of cancer.

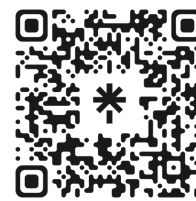


### What motivated you to start a PhD and why did you choose that topic?

What motivated me to start a PhD was my passion for science, teamwork, and the idea of achieving results that could one day serve as the foundation for new treatments for human diseases. Cancer development and the extracellular matrix (ECM) were the topics that caught my attention the most when I was a university student. When the time came to choose a place for my undergraduate thesis, the Tumor Microenvironment Laboratory appeared and gave me the opportunity to join their team, so I like to think it was meant to be.



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**Paolo Rosales**



## Spotlight Researcher Interview



**How do you overcome the ongoing financial challenges in research globally as a PhD candidate in order to isolate the noise and focus on research?**

It is indeed challenging to stay focused on research when salaries are low and funding opportunities that support daily work are limited. However, teamwork and collaborations with colleagues, both in Argentina and around the world, provide strong motivation to keep going and remind us of the importance of our work. Moreover, our role as scientists also involves communicating to the world what we do and why it matters, so that such underfunding does not happen again.



**Name the most fascinating thing about the extracellular matrix**

I am particularly fascinated by the ECM's ability to remodel itself in response to different situations.



**What's a recent publication that you really enjoyed and you feel everyone should check?**

One of the latest papers I have found is: "Extracellular matrix remodeling in tumor progression and immune escape: from mechanisms to treatments" doi: 10.1186/s12943-023-01744-8. This review is comprehensive and complex, reviewing all aspects related to the extracellular matrix in cancer. It also places particular emphasis on the ECM remodeling and immune system, which aligns with my research interests.



**What advice would you give to your younger self?**

You and your work are worth it. Have faith in the process, and most importantly, believe in yourself.

