# TV CORE

September 2024

Monthly Newsletter



## **MAGALI PORRACHIA**

# Celebrating Magali's Journey

We are both excited and sad to announce that Magali will be taking on a new role as Core Manager at Illumina after seven remarkable years with our team.

Magali joined us as an SRA2 and quickly distinguished herself with her incredible work ethic, unwavering curiosity, and deep passion for science. Her growth into the role of Lab Supervisor has been nothing short of inspiring. Throughout her tenure, she has been pivotal in establishing our quality assurance protocols and developing the complex integration site assay, a task that many before her attempted.

Together, we navigated the challenges of the COVID pandemic, where Magali's resilience and commitment truly shone. She created an environment where her team felt like family, showing genuine care for everyone and offering unwavering support. Her thoughtful approach to every challenge and her effective communication with our collaborators have made her a cornerstone of our success.

While we are excited for Magali as she embarks on this new journey at Illumina, we will certainly miss her presence and the kindness she brought to our lab. Please join us in congratulating Magali on her achievements and wishing her all the best in her future endeavors.

Thank you, Magali, for everything you have done. You will always be a valued member of our team!

## PROJECT HIGHLIGHT

The study "Cytokine and chemokine receptor profiles in adipose tissue vasculature unravel endothelial cell responses in HIV" examines how glucose intolerance impacts endothelial cell (EC) function in people living with HIV (PLWH). Using single-cell transcriptomics, the researchers analyzed cytokine and chemokine receptor expression in subcutaneous adipose tissue. Key findings include:

- Arterial and capillary ECs showed higher interferon and TNF receptor expression than venous ECs and vascular smooth muscle cells (VSMCs).
- Venous ECs expressed more IL-1R1 and ACKR1, while VSMCs had higher IL-6R expression.
- In PLWH with glucose intolerance, arterial ECs expressed elevated levels of IL1R1, IL6R, CXCL12, CCL14, and ICAM2, correlating with increased blood glucose levels.
- Plasma from PLWH activated ECs, upregulating genes linked to oxidative phosphorylation and TNF-α pathways.

The study highlights EC heterogeneity and its alteration by glucose intolerance, underscoring the role of inflammation in cardiovascular disease risk in PLWH. Further research is needed to explore potential therapeutic targets.

This study was done by our collaborator, Celly Wanjalla.

## **LOOKING FORWARD**

The month of October is Breast Cancer Awareness Month!

Beginning on October 2, the Jewish highholidays of Rosh Hashanah and Yom Kippur mark the ringing in of the New Year: 5785.

Indigenous People's day is observed on October 12.

Halloween is coming up next month on October 31! Get your candy and your costumes ready.

## TRY SOMETHING NEW!

From October 2nd to the 7th, The Del Mar Wine + Food Festival is a six-day event in one of Southern California's iconic beach communities. It showcases unique culinary experiences with top chefs, curated wine tastings from renowned producers, and walkaround tasting adventures. The festival also features immersive lifestyle events, making it a premier destination for food and wine enthusiasts.

The "Give it a Spin!" event at ICA San Diego/North, located at 1578 South El Camino Real, will be held on October 6th from 4-6pm. Participants can enjoy music, fun, and a hands-on experience with wheel-throwing in the ceramics lab. This in-person event offers a great opportunity to relax, meet new people, and try out pottery-making using a ceramics wheel in a creative and social environment.

The 23rd Annual San Diego International Film Festival, taking place from October **16-20**, celebrates the power of film by bringing together film lovers and filmmakers from around the world. The 5day event includes Red Carpet moments, such as the Opening Night Film Premiere at Balboa Park and the Night of the Stars Tribute in La Jolla. Attendees will enjoy screenings of studio and independent films, documentaries, and shorts, along with filmmaker Q&As and panels, hosted at AMC UTC 14 at Westfield UTC.

### **BELOW: LIZZIE AND SARA AT CFAR RESEARCH DAY**





SARA ON HER



**BELOW: NOAH AND MATTIA AT CFAR RESEARCH DAY** 



## **SHOUTOUT!**

We would like to wish a happy birthday to Sara (9/17).

This month at CFAR research day, the TV Core had a robust presence: Lizzie won the rising star award and Antoine, Katie, Mattia, and Noah gave presentations!

On Sept 5, Mattia's interview with Physician weekly came out titled: "Q&A: Routine Screening for Neurocognitive Impairment in HIV May Improve ART Adherence." highlights that the HIV landscape has evolved significantly over the past decade, with cognitive impairment increasingly linked to poor viral control and medication adherence. His study reveals that even asymptomatic cognitive issues can substantially elevate the risk of viral failure, underscoring the need for comprehensive assessments and interventions that address both cognitive health and ART adherence in people living with HIV.