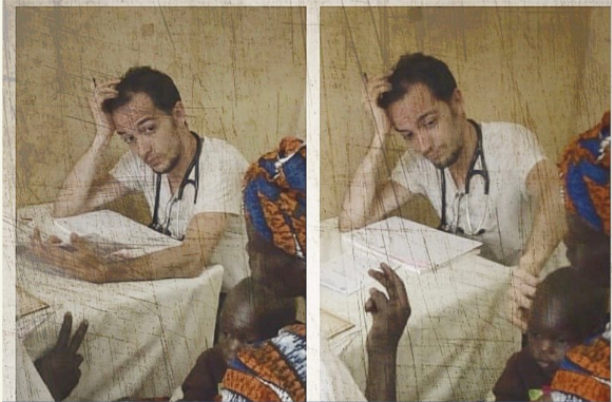


TV CORE

May 2024

Monthly Newsletter



MATTIA TRUNFIO, PHD

Although we only got the pleasure of meeting Mattia this past year towards the end of his PhD, he has a long history with infectious diseases and has traveled all over the world in his career thus far. Mattia began his journey in high school studying classics to teach literature but soon shifted his focus towards becoming a forensic psychiatrist. During his mandatory residency in infectious disease while studying pathology, he heard stories from his outpatient clinic patients that shifted his focus fully toward infectious disease as well as neurology. This is when he began researching HIV and infections of the central nervous system.

Speaking about this passion, Mattia notes, "I've been specifically always fascinated by the "biology" of feelings, thoughts and mind functioning and how microbes, parasites and viruses can actually dictate a large part of human behaviors, mood, and evolution over the life span of a person as well as over human history."

He has traveled to and worked in a myriad of places: Liverpool (professional diploma in tropical medicine), Uganda (rural doctor), Brighton, Zanzibar, Senegal, Cambodia, Indonesia, Perú, and Europe. He would love to settle down but sees himself retired in Panama or a lost island in Indonesia selling kava drinks!

He has many hobbies including entomology, singing, photography, traveling, writing, and working out. Next time you see him, ask about his half finished fantasy novel!

Let's congratulate Mattia on obtaining his PhD and accepting his position as a postdoc in our lab!

PROJECT HIGHLIGHT

"HIV-1 transmission dynamics among people who inject drugs on the US/Mexico border during the COVID-19 pandemic: a prospective cohort study."

This study recruited participants from three groups: people who inject drugs in San Diego and engaged in cross-border drug use in Tijuana (SD CBDUs), people who inject drugs in San Diego and Tijuana but do not engage in cross-border drug use (SD NCBDUs), and people who inject drugs only in Tijuana (TJ NCBDUs). The study found that HIV prevalence at baseline was 8%, with higher rates in TJ NCBDUs. Over 18 months, nine HIV seroconversions occurred, mainly in TJ NCBDUs.

The study also used Bayesian phylogenetic analysis to identify local transmission clusters and found that 56% of these clusters had sequences from both the U.S. and Mexico (mixed-country). Interestingly, the age of some clusters overlapped with the COVID-related US-Mexico border closure in 2020. Despite the closure, one large mixed-country cluster continued to grow, highlighting the persistence of cross-border HIV transmission.

The findings suggest the importance of addressing cross-border HIV clusters, especially during border closures and pandemics. The study recommends implementing mobile harm reduction services, coordinating with municipal HIV programs, and promoting anti-retroviral therapy (ART) and pre-exposure prophylaxis (PrEP) to reduce HIV transmission in the region.

LOOKING FORWARD

It is National Caribbean-American HIV/AIDS Awareness Day on **June 8th**, let's raise awareness and support for those affected by HIV/AIDS in the Caribbean-American community.

Celebrate Father's Day on **June 16th**.

Mark your calendars for National HIV Testing Day (HNTD) on **June 27th**. Join us in promoting HIV testing and prevention initiatives.

Exciting news! We're welcoming new students to our research lab for the summer. Stay tuned for updates and opportunities to connect with our growing team.

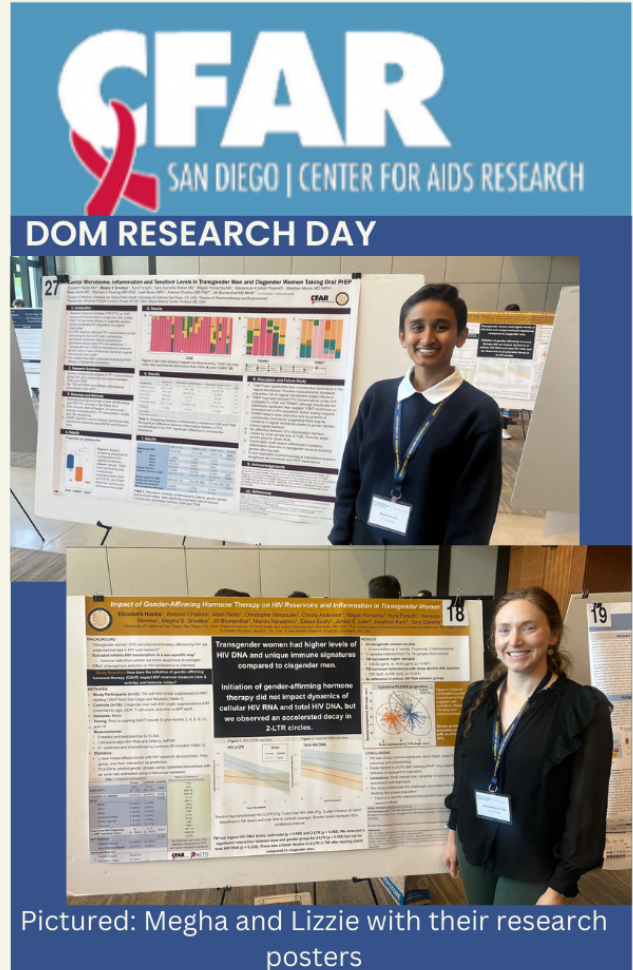
TRY SOMETHING NEW!

Are you a fan of the theatre? Consider seeing the production of Camelot being put on at North Coast Repertory Theatre. Sara's son, Noah Weibel, is performing in the production that will be open from May 29-June 30!

With summer break and father's day coming up, consider looking into the San Diego City Pass for some family fun! Get up to 43% off tickets that give you access to either (or both) Legoland and SeaWorld and then choose 3 more attractions to visit from: San Diego Zoo or Safari Park, USS Midway Museum, City Cruises, Birch Aquarium, Old Town Trolley Tour, and the Maritime Museum of San Diego. Children age 3-12 start at \$152 for Seaworld +3 attractions and \$157 for Legoland +3 attractions, or take them to both +3 attractions for \$222.

If you find yourself by Petco Park, you are also by some of San Diego's favorite downtown Mexican restaurants including Las Cuatro Milpas (\$), La Puerta (\$\$), Puesto at the Headquarters (\$\$), and many more! We want to hear your reviews!

Pictured below: Dr. Davey Smith at DOM research day



Pictured: Megha and Lizzie with their research posters

SHOUTOUT!

We would like to wish a very happy birthday to Momta (5/5), Kyra (5/7), Millie (5/17), Bryan (5/17), Vanessa (5/19), Frida (5/20), and Andrew (5/26).

Additionally, a **HUGE CONGRATULATIONS** to **Yijie Luo** on his acceptance to **UC Irvine's Medical School!** We are so proud of you and this accomplishment.

This past month we celebrated both Mother's Day and Memorial Day. We would like to take a moment to acknowledge all of the mothers in our lab and thank them for their incredible hard work. We would also like to acknowledge and thank those who served in the United States military, especially as we work so closely with the San Diego VA. Thank you for your service.