TV CORE

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Monthly Newsletter



ELIZABETH LEON

Elizabeth was born and raised in South Los Angeles, where her early experiences shaped a deep commitment to healthcare and community advocacy. After high school, she moved to San Diego to earn her Bachelor's Degree in Human Biology with a pre-med focus at UC San Diego.

Her career began in patient care as a medical assistant at an endocrinology clinic in Chula Vista. There, she worked closely with patients from underrepresented backgrounds, gaining valuable clinical insight and a stronger understanding of the healthcare challenges faced by marginalized communities. This experience sparked her interest in clinical research and addressing health disparities through science.

For the past two years, Elizabeth has been a Staff Research Associate at TV CORE, where she has contributed to vital HIV/AIDS research while exploring its broader social impact. Her work has deepened her understanding of how science can drive meaningful change for underserved populations.

Outside of work, Elizabeth is a proud mother to an 18-month-old daughter and is joyfully expecting another baby girl this July. Juggling motherhood, a growing research career, and family life isn't always easy, but Elizabeth credits a strong support system for helping her thrive. In her downtime, she loves watching new TV shows, reading, and spending quality time outdoors with her family—whether at the beach, on hikes, or enjoying local events in San Diego.

As she looks to the future, Elizabeth is excited to continue raising her daughters in a nurturing environment alongside her boyfriend while advancing her work in health equity and research that empowers "progressive changes towards communities disadvantaged by the system."

Thank you, Elizabeth, for all your hard work and congratulations on baby #2! We are truly impressed by you and your unwavering dedication to both your family and your impactful work in healthcare and research.

PROJECT HIGHLIGHT

The paper titled "The Need for Lenacapavir Compulsory Licences in Ending the HIV Epidemic" argues that lenacapavir, a long-acting injectable preexposure prophylaxis (PrEP) for HIV prevention, has the potential to be transformative in curbing the global HIV epidemic. Recent clinical trials (PURPOSE-1 and PURPOSE-2) demonstrated that twice-yearly lenacapavir injections provided near-total protection against HIV, even in high-risk populations. However, the current access strategy led by Gilead Sciences, the drug's patent holder, is significantly limiting its potential impact. Gilead's voluntary licensing deal excludes many middle-income countries, where 23% of new infections occur, and restricts generic manufacturing and distribution through clauses that hinder affordability, scale-up, and regional supply chains. Justifiably, criticism has come from major global health organizations like UNAIDS, MSF, and Unitaid, who argue the deal undermines equitable access, violates ethical standards (such as the Declaration of Helsinki), and fails to recognize lenacapavir as a global public good.

The authors propose expanding access through more inclusive licensing, preferably via the Medicines Patent Pool, and lifting restrictions on generic production and pricing transparency. If Gilead fails to adjust its approach, countries may need to pursue compulsory licensing, a legal mechanism that enables local production or importation of patented drugs without the patent-holder's consent. Historical precedents for compulsory licensing in HIV and other health crises support its legitimacy.

In summary, the paper calls for coordinated global action to prevent HIV effectively and equitably, emphasizing that systemic changes are necessary to avoid repeating past failures in global health access.

LOOKING FORWARD TO JULY

This July 4, celebrate independence day by watching the Big Bay Boom, San Diego's boat parade and fireworks display.

Birthdays coming up in July:

Harold Amogan - July 5th



TIME

FDA Approves a Twice-Yearly Shot to Prevent HIV

HEALTH HIV/AIDS

https://time.com/7295343/fda-hiv-shot-lenacapavir

On June 18, 2025, the U.S. Food and Drug Administration approved lenacapavir (marketed as Yeztugo) as the first long-acting injectable medication for HIV prevention that only needs two doses per year. Clinical trials showed outstanding efficacy: 96% protection in cisgender women and 100% in men who have sex with men and gender-diverse individuals. Originally approved in 2022 for treating drug-resistant HIV, its long half-life and powerful antiviral action made it a strong candidate for prevention.

Experts describe this as a major breakthrough comparable to a vaccine in its ability to prevent infection but caution that it may complicate future HIV vaccine trials, as withholding such a highly effective intervention from participants raises ethical concerns. Additionally, while Yeztugo promises improved adherence over daily pills, its six-month clinicadministered injections, along with the need for regular HIV testing, pose logistical and access hurdles, especially in low and middle-income countries.

Despite Gilead's efforts, including royalty-free licensing deals with six generic manufacturers covering 120 countries, funding shortfalls and weakened healthcare infrastructure, due to cuts in programs like USAID and PEPFAR, threaten to limit its global reach.

The company is exploring innovations like selfinjectable or yearly formulations and aims to broaden access, but realizing its full impact will require resolving structural funding, delivery, and equity challenges.

A QUICK WORD

In the face of ongoing political and social challenges, the Translational Virology (TV) Core remains unwavering in our commitment to fostering a safe, respectful, and inclusive environment for all. We celebrate the diversity of our team and the communities we serve, including people of all gender identities, sexual orientations, and immigration backgrounds. Our strength comes from embracing difference, uplifting each other, and standing firmly for equity and human dignity in science and beyond.



JUNE 6: STAND UP FOR SCIENCE **EDUCATION RALLY**



SHOUTOUT!

We would like to formally introduce our summer students Ava, Aranza, Gabriela, and Eric! Gabriela and Eric will be highlighted in the

next newsletter!



Hello everyone! My name is Ava and I am a rising junior at La Jolla High School. I love science and want to pursue medicine. I enjoy dancing and playing the piano. When I am <u>not in</u> school or doing either of those, you will find me at the beach!

Aranza



Hi all! My name is Aranza, I'm an international college student, and I'll be starting my 2nd year in Biology at San Diego Mesa Community College next Fall, with hopes of transferring to UCSD in the future. I love to paint and read in my free time, I'm particularly passionate about science and that interest shines

through on my paintings. I also enjoy going for a run on the afternoons, meet new people, so excited of being part of Dr. Gianella's lab opportunity will become a milestone in my college journey!