# Advanced Technology Core

San Diego Center for AIDS Research

*August 2026* *Monthly Newsletter*




## ELENA BARONE

Elena was born and raised in Sicily, at the foot of Mount Etna, one of the world's most active volcanoes. Since then, her path has taken her across the map—from Spain, where she conducted research for her master's thesis, to Ireland for her PhD, and even Japan, where she lived while her husband was stationed there. A proud military spouse, Elena remains closely involved in the military community alongside her husband, who is preparing to serve aboard the USS Green Bay. Together, they regularly volunteer with organizations supporting military members and their families.

At home, Elena is happily outnumbered by her two cats: Leo, a born comedian, and Cali, who she jokes is really Leo's cat more than hers. Neither pays her much attention, but she insists they are the two sweetest creatures you could ever meet. Outside the lab, Elena loves crossword puzzles, reading, drawing, gardening, and spends plenty of time in the kitchen baking pizzas and loaves of bread from scratch. She has also collected postcards since childhood and now has more than 800, each connected to a diary documenting her travels and the family and friends who thought of her along the way. Her next goal is to collect a postcard from every U.S. state.

Elena joined the lab as a postdoctoral researcher/ NIH TRAIN T32 fellow, where she studies autophagy, the cell's self-cleaning and quality-control system, in the context of HIV and the brain. Her work focuses particularly on measuring autophagic flux directly in human clinical samples, an area that remains largely unexplored in the field. Before coming to UC San Diego, Elena earned her PhD in Ireland and trained as a microbiologist in Italy, bringing an international research background to her work in the lab.

## PROJECT HIGHLIGHT

**Elizabeth Hastie et al., 2026**
**PMID: 42461585**

The review, "**The HIV Reservoir and Immune Landscape Across the Life Course of Women: Implications for Cure Strategies,"** examines how sex hormones and reproductive transitions influence HIV persistence and the HIV reservoir throughout women's lives. HIV cure research has historically relied heavily on male-dominated cohorts, leaving major gaps in understanding how hormonal states affect HIV biology in women and gender-diverse people. Estrogen and progesterone can alter immune activation, T-cell function, inflammatory signaling, mucosal barrier integrity, and HIV transcription. These effects vary across the menstrual cycle, pregnancy, postpartum period, menopause, and during exogenous hormone use such as contraception, gender-affirming hormone therapy (GAHT), and menopausal hormone therapy. For example, estrogen generally suppresses HIV transcription and may promote latency, whereas progesterone-dominant states can increase mucosal susceptibility and potentially support viral persistence. Menopause may represent an important turning point because declining estrogen is associated with increased inflammation, immune aging, and potentially greater HIV reservoir activity.



Love and Liberation
by Emma Weibel (2025)
Acrylic on canvas.

HIV cure strategies need to become "hormone-informed" and life-course–specific. Menstrual phase, pregnancy, menopause, and exogenous hormone use should be treated as biological variables in cure studies rather than used as reasons for exclusion. Hormonal transitions could even represent windows for intervention. Women and gender-diverse people remain substantially underrepresented in cure studies, including tissue-based and rapid-autopsy research, limiting scientists' ability to understand reservoirs in reproductive and hormone-responsive tissues. The authors advocate for greater inclusion of transgender and gender-diverse participants, sex- and reproductive-stage–specific analyses, and meaningful community involvement. Overall, the review argues that including diverse populations is scientifically necessary to develop HIV cure strategies that work across different hormonal environments and stages of life in order to benefit a larger, more inclusive, population.

## REMEMBERING DOLLY PARTON




As we remember **Dolly Parton**, we celebrate an iconic musician but also a lifelong advocate for compassion, generosity, and acceptance. Dolly used her platform to support HIV/AIDS organizations and research at a time when the disease was surrounded by fear and stigma, while also consistently expressing love and acceptance toward the LGBTQ+ community. Through songs like "Family," "Travelin' Thru," and her longstanding message that everyone deserves to be treated with kindness, she became a source of comfort for many queer people, especially those in conservative communities.

Her philanthropy extended to many causes. Through the Dollywood Foundation and Imagination Library, Dolly helped provide **hundreds of millions** of free books to children, while also supporting medical research, disaster relief, education, and communities in need. Her legacy is ultimately one of using her success to lift others up, a reminder that compassion, generosity, and acceptance has impact far beyond the stage.

## COMING UP

**Sept. 7:** Labor Day (UCSD Holiday)

**Sept. 13–20**: San Diego Restaurant Week. More than 100 restaurants across 30+ neighborhoods are participating this year!

**Sept. 15–Oct. 15**: Hispanic Heritage Month

**Election Reminder:** California's voter registration deadline for the November 3rd General Election is **October 19**. Missed the deadline? California also offers Same Day Voter Registration through Election Day.

**Birthdays:**
September 17th - Sara Gianella

**Labbiversary:**
September 1st - Harold's 8th year

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## Rio Panel and Documentary Screening Photos



















