Same family, different fate: why schizophrenia strikes one sibling and spares another

Identical twins share every gene, yet when one develops schizophrenia the other does so less than half the time. Science still cannot fully explain why.



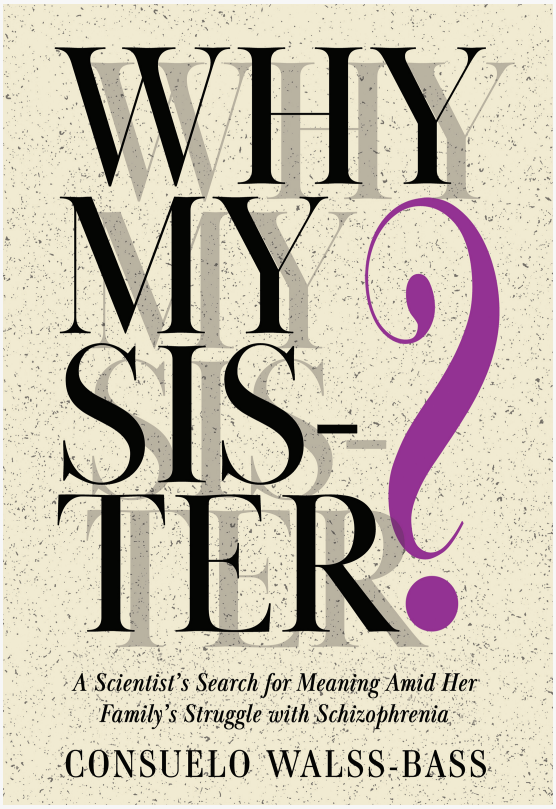
Paty · Torreón, Mexico · Early 1990s. They called her the pretty one. She was a model and she was brilliant. The illness did not care.

HOUSTON, TX, UNITED STATES, September 15, 2026 / EINPresswire.com/ -- Two children grow up in the same house, at the same table, with the same parents. One develops schizophrenia. The other does not. Families have asked why for as long as the illness has had a name, and psychiatric genetics, for all its progress, still cannot fully answer them.

The puzzle is sharpest in identical twins. Twin studies have placed the heritability of schizophrenia, the share of differences in risk attributable to genetic differences, at roughly eighty percent for decades. Yet concordance between identical twins, who share the entire genome, does not reach fifty percent. Both figures are well established, and they do not fit together comfortably. Something that is not sequence variation accounts for the difference, and identifying it remains one of the open problems of psychiatric genetics.

Ordinary brothers and sisters share only about half of the genetic variants that differ between people, and no two children, even under one roof, meet the world in exactly the same way. The field therefore looks beyond the DNA sequence itself: to epigenetic changes, chemical marks that switch genes on and off without altering the code, to how stress is registered by the body, and to the course of brain development in each individual.

One way to study that gap is to examine the brain directly. The UTHealth Houston Brain Collection for Research in Psychiatric Disorders has received more than one hundred seventy-five donations since 2014. The collection supports transcriptomic profiling, a measure of which genes are active, and epigenetic clock analysis, an estimate of biological aging, in postmortem brain tissue. The collection is directed by Consuelo Walss-Bass, Ph.D., who holds the John S. Dunn Foundation Distinguished Chair in Psychiatry at UTHealth Houston and directs its Psychiatric Genetics Program.



WHY MY SISTER? A Scientist's Search for Meaning Amid Her Family's Struggle with Schizophrenia

Separately, her group generates induced pluripotent stem cells, adult cells reprogrammed to an embryonic-like state, from donor skin biopsies and differentiates them into neurons and into three-dimensional cortical organoids, each smaller than a pea and each carrying the donor's genome. Working from cells of affected sibling pairs in Costa Rica, her group was the first to demonstrate specific signaling alterations in neurons derived from people with schizophrenia, identifying convergent abnormalities in PI3K/GSK3 signaling, a cellular pathway that regulates growth and survival. Drawing organoid lines from families with multiple affected members concentrates genetic signal that is diffuse across unrelated cases.

> “I firmly believe we will get there, and that my sons will see in their lifetimes a cure for schizophrenia.”
>
> *Dr. Consuelo Walss-Bass, Psychiatric Genetics Program, UTHealth Houston*

The question is not only professional for her. Her mother, Eugenia, lived with schizophrenia that went untreated across four decades in Mexico and the United States. Of her five children, one received the same diagnosis: Paty, the author's younger sister. The number of affected siblings was close to what the statistics predict. Which sibling it would be was not predicted by anything the family could see, and was not explained by birth order or by the age at which each child was exposed to their mother's illness.

That science and that family history meet in her book, Why My Sister? A Scientist's Search for Meaning Amid Her Family's Struggle with Schizophrenia, from Allele Books. The family narrative, told in the third person, follows three generations between Mexico and the United States. Interleaved with it are scientific passages on positive and negative symptoms traced to Eugen Bleuler's 1911 paper, on the FKBP5 gene variants that modulate the body's cortisol stress

response and can either buffer a person against early adversity or sensitize them to it, and on the current state of stem cell modeling. The two lines can be read together or separately.

The book is candid about what has not been solved. Clozapine, the only medication that has fully stabilized the author's sister, was discovered fifty years ago and remains the only option in treatment-resistant schizophrenia. For decades a burdensome blood monitoring requirement led many clinicians to decline to prescribe it, until the FDA released it from that requirement in 2025. The author does not present stem cell work as a cure. She presents it as a method by which a cure might become findable.



The Walss family commemorating their move to Brownsville, Texas. From top left: Rudy, Paty, Jenny, Eugenia, Rodolfo, Chelo, Leo, and Jenny's eldest son Danny.

The book's stated antagonist is stigma rather than the illness. Against it, the author repeats a plain sentence twice: Paty is doing well. Paty is fifty, lives above her sister's garage, takes her medication, dresses for church on Sundays, and draws with her sister on Saturdays.

On what the writing changed, Dr. Walss-Bass said: "The more I wrote, the more I understood my mother. The lifetime of anger toward her slowly dissipated, giving way to empathy, compassion, and admiration for all that she endured." On her sister: "I have always loved Paty, but now I am in awe of her."

The book carries endorsements from investigators across psychiatric genetics and neuroscience, among them Daniel R. Weinberger of the Lieber Institute for Brain Development, Kenneth S. Kendler of Virginia Commonwealth University, Sir Mike Owen of Cardiff University, Robert Plomin of King's College London, Michael Meaney of McGill University, Mayana Zatz of the University of Sao Paulo, Ronald C. Kessler of Harvard Medical School, and Maria A. Oquendo of the University of Pennsylvania, a past president of the American Psychiatric Association.

Allele Books releases Why My Sister? today. The goal is to make the book available in English, Spanish, Portuguese, French, German, and Italian from launch through the end of 2026, each a full literary edition prepared for its own market, with a Japanese edition to follow later in 2026.

The complete book is available free of charge to journalists. Email

mali.wong@genomicpress.com to request it. The author is available for interview in English or Spanish. Twenty-four images from the book are available in high resolution with captions and full publication rights.

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