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Celia García Velázquez has spent 5 years searching for her son Alfredo, who disappeared in Veracruz state. She has helped excavate the largest clandestine grave found in Mexico.

Félix Márquez

## How forensic anthropologists are helping the families of Mexico's disappeared seek justice

By [Lizzie Wade](#) | Dec. 14, 2016, 9:00 AM

**Este artículo está disponible en español.**

On 18 July 2011, Celia García Velázquez's son Alfredo disappeared. The 33-year-old lived in a town called Chiconquiaco in the Mexican state of Veracruz, and at the time of his disappearance he was running for president of his municipality against a candidate supported by the country's most powerful political party. "Everybody knew him," says García Velázquez, a stout woman with hair the color of a lion's mane and a blast of bright pink lipstick. One day Alfredo went to Xalapa, the capital of Veracruz state, to sort out the paperwork for a car he'd bought. Like so many young men in Veracruz these days—more than 700 since 2006—he never made it home.

"I need to know what happened," García Velázquez says to 15 people gathered in a classroom overlooking the courtyard of a church in this port city. Her voice breaking, she says, "How is it possible that someone can disappear like that, as if he never existed?"

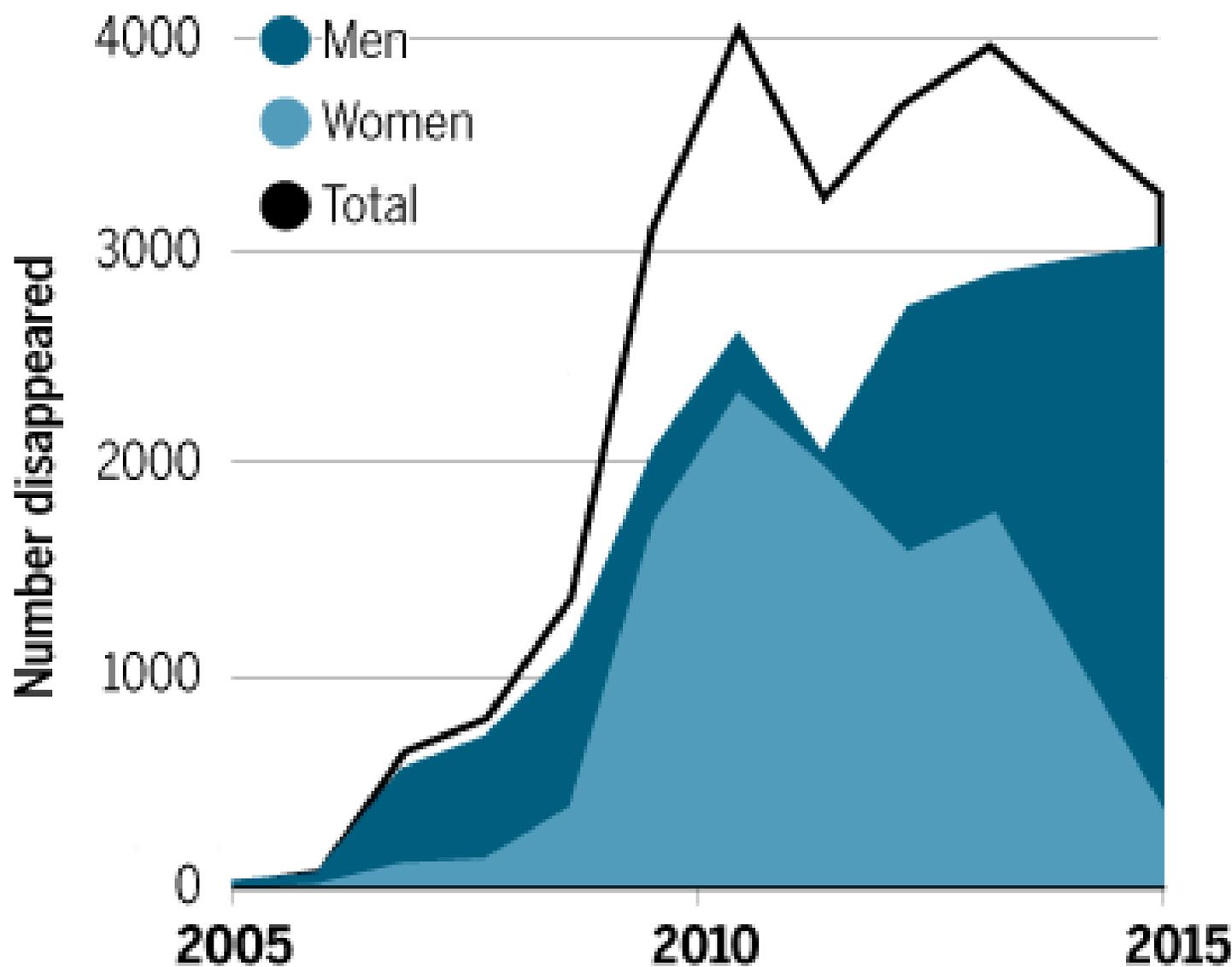
The group nods. They, too, have family members who have disappeared. Many here are mothers looking for their sons. Others are searching for brothers or cousins; one woman seeks six loved ones. They are part of the Solecito collective, a group of more than 100 people searching for the disappeared. And they are getting help from a new source: forensic anthropologists.



likely an underestimate, as many disappearances go unreported because families fear retaliation.) Some are kidnapped by drug cartels and either killed or forced into labor or human trafficking. Human Rights Watch, a nonprofit based in New York City, says that many others are abducted by the police and military, and that the government does little to investigate. The 15 people in the classroom this weekend have come for help searching for their disappeared.

### Counting the missing

Disappearances in Mexico spiked after the drug war began in 2006, and have now reached about 28,000, although this official tally is likely an underestimate.



At the front of the classroom is anthropologist Roxana Enríquez Farias, who in 2013 founded a nonprofit organization called the Mexican Forensic Anthropology Team (EMAF) based in Mexico City. EMAF anthropologists often serve as expert witnesses, evaluating state investigations of disappearances. But on this November weekend, Enríquez Farias is explaining to the families themselves the steps of a

search for the disappeared, and how to use their amateur searches to pressure the authorities into action. "We want to build the base [of knowledge] that will support their right to truth and justice," Enríquez Farias explains.

"Until a few years ago, we scientists didn't think about the families [of victims]," says Lorena Valencia Caballero, a forensic anthropologist at the National Autonomous University of Mexico in Mexico City who is not part of the group. But as the disappearances mounted into a humanitarian crisis, EMAF's work became "exceedingly necessary," she says. "It now falls to anthropologists to help the families understand how we determine age, what are the stage[s] of decomposition, how do organized crime groups behave—a thousand things they should

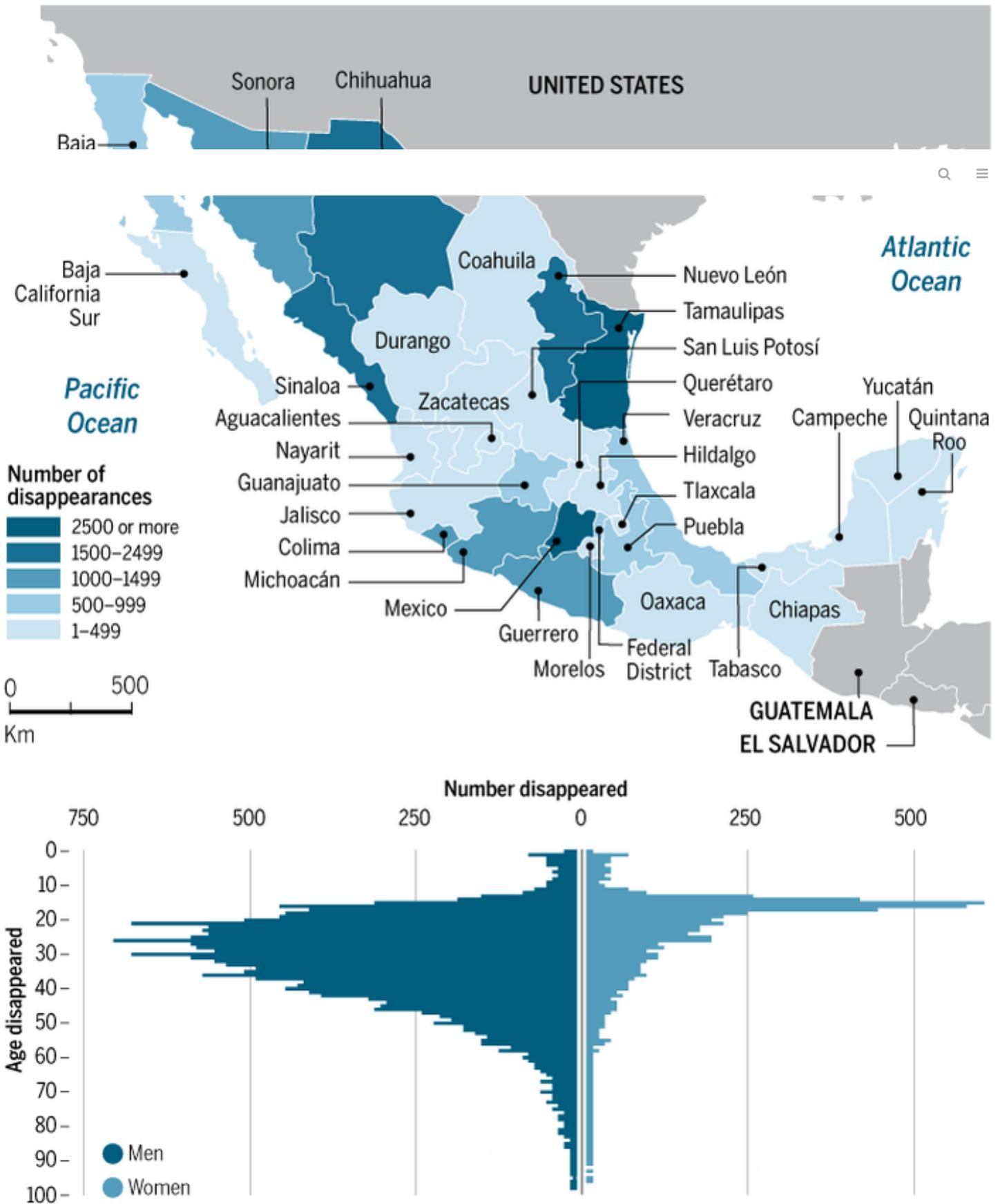


"It's a brilliant strategy" when authorities are not sensitive to families' needs, says forensic anthropologist Nicholas Márquez-Grant of Cranfield University in the United Kingdom. When he met families of the disappeared in Mexico this fall, "I could see that many relatives were completely lost." He hopes EMAF's model can be replicated in other countries, such as Iraq, where families are left by the wayside in disappearance investigations.

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### Who vanishes

Disappearances are most common in states along the U.S.-Mexico border and in central Mexico. Teenage girls and young men are at the highest risk. Some are killed and others are conscripted into forced labor and human trafficking.



(Graphics) G. Grullón/Science; (Data) Mexico's National Registry of Missing or Disappeared Persons

On Mother's Day this year, Solecito organized a rally to bring attention to the disappearances and protest government inaction. As the group listened to a prayer, young men moved into the crowd and discreetly slipped folded papers to several Solecito members. They were

photocopies of a hand-drawn map of a Veracruz neighborhood called Colinas de Santa Fe, with crudely drawn directions to an empty field. There, someone had drawn a cluster of crosses labeled *cuerpos*—“bodies.”

The members of Solecito weren't sure what to do with the information. Where had it come from? What could grieving civilians do about a potential mass grave? After weeks of deliberation, they decided to start digging. So they contacted Enríquez Farias.

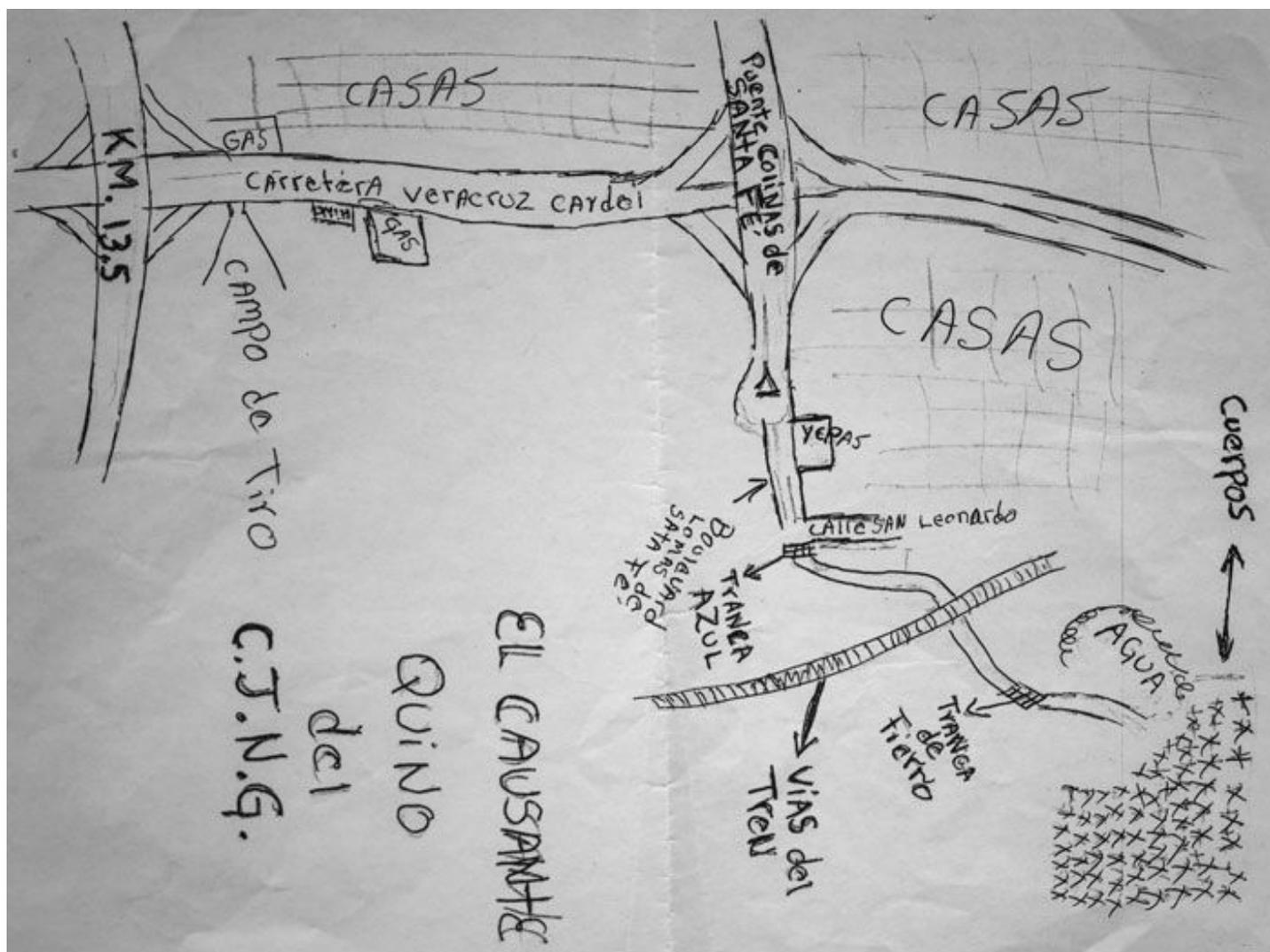
Enríquez Farias had come face-to-face with Mexico's disappearance problem while working as a forensic archaeologist in the prosecutor's



bring justice to victims. That inspired her to found EMAF, which now employs seven scientists and two student volunteers and is funded by grants from international agencies.

Before Solecito went out to dig up graves this summer, Enríquez Farias came here and gave the group a workshop on forensic anthropology. “They were preparing themselves for what they would find,” she says. She explained how archaeologists examine and remove the layers of earth deposited over a grave, how physical anthropologists measure bones to determine the gender of a skeleton, and which family members can provide the most useful samples for DNA identifications.

But she steered clear of giving the searchers explicit instructions. “We don't teach them techniques. We teach fundamentals,” she says. Once families understand the principles, “they can evaluate the techniques,” including those they see the police using, and judge whether evidence is being lost.



This hand-drawn map directed Solecito to the mass grave in Colinas de Santa Fe. They have uncovered more than 100 bodies since August.

Félix Márquez

That approach wins approval from forensic bioarchaeologist Derek Congram of the University of Toronto in Canada. Trying to turn families into practicing scientists overnight would be impossible as well as “irresponsible,” he says.

In August, Solecito began to dig, under the watchful eye of the local police and prosecutor's office. “We use rudimentary methods, but they're effective,” says Lucy Díaz, one of Solecito's founders. Searchers look for places where the earth has a different texture or color than

the surrounding ground, or where plants have been cleared. Then they plunge a 2-meter-long metal rod into the earth, bring it up, and sniff the tip for the stench of decomposition. If they smell death, they dig.

Since August, the group has uncovered 107 graves, containing 124 skulls and myriad other remains, all in the area indicated by the map. It is the largest mass grave discovered in Mexico so far. "It's not a clandestine grave. It's a clandestine cemetery," Díaz said at a scientific meeting in October. The graves, she says, are at least 1.6 meters deep, and most of the bodies are buried in garbage bags. The majority are men, many still blindfolded. A few show gunshot wounds.



disappearances between 2007 and 2013, and found that the Mexican police or military were involved in 149 of them.

But Solecito's initiative spurred the government to send forensic investigators from Mexico's federal police force, known as the Scientific Police, to the cemetery. Solecito locates the bodies, but once a grave is found, the investigators document everything in and around it—clothing, bandages, and even the occasional work identification card, Díaz says—and remove the remains for lab analysis.

It's slow going: So far, 52 of 107 graves have been fully processed. Solecito expects an update from the Scientific Police in January 2017, perhaps including the first identifications. (The National Security Commission, which oversees the Scientific Police, did not respond to interview requests.)

After searching for her son independently for 5 years, García Velázquez joined Solecito in August, when she heard about the cemetery. She hopes Alfredo isn't there, that he's still alive somewhere—perhaps held by his political rivals, or forced to work for a drug cartel. But she knows that even if her son isn't buried in Colinas de Santa Fe, someone else's son is. She helps excavate in the cemetery twice a week. "It's horrible. It hurts your heart," she says. But she believes that if she and other family members don't take action, the bodies will stay in the ground, lost and unidentified, forever.



Workshop attendees piece together a puzzle outlining the steps of a forensic investigation.

Félix Márquez

Enríquez Farias admires the bravery of the searchers but worries their work won't result in justice. The problem, she says, is that local prosecutors aren't doing the basic investigation of cases that could lead to hypotheses about who is likely to be buried at Colinas de Santa Fe. That means authorities can't efficiently compare DNA from the remains to probable family members, or even use basic investigative strategies like matching the clothes a missing person was last seen wearing to clothes found in the cemetery. "The investigation isn't just going and looking for bodies. There are steps before that," Enríquez Farias says.

Congram sees a parallel in Spain, where families in recent years have pushed investigators like him to search for loved ones who disappeared during the country's civil war in the 1930s. "There was a rush to go out and dig up bodies," he says, but it hasn't provided much closure. "A lot of bodies were coming up without background research being done." One site where he worked yielded more than 400 bodies, but so far, "not one of them is identified."

Everybody in the classroom that November day has notified prosecutors by filing missing person reports, sometimes against the wishes of other family members, who fear becoming targets themselves. Most have also provided a description of the disappeared, plus a list of their



So in this latest workshop, Enríquez Farias shows families how to pressure prosecutors to tackle their cases. She invites Ibetta Estrada Gazga, a lawyer with the Institute for Security and Democracy, a nonprofit in Mexico City, to the front. Prosecutors "have a constitutional obligation to investigate," Estrada Gazga explains. Families can check progress by requesting a copy of the prosecutor's case file, she tells the group. If the file shows that nothing has happened, a judge can order the prosecutor to return to the case.

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## “ Science is a search for knowledge. But not just any knowledge. It has to be the truth. ”

*Roxana Enríquez Farias, anthropologist, founder of Mexican Forensic Anthropology Team*

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Later, Enríquez Farias says she's surprised at the direction her work has taken. "At first we thought that just doing exhumations or DNA analyses would be enough." She sighs. "It's always so much more complicated." For example, in one of EMAF's cases in another state, they eventually won the right to exhume a body to confirm a DNA identification. But the cemetery is in such disarray—one private grave held three extra bodies—that after three attempts, EMAF has yet to locate the body in question.

Then there are the legal issues: EMAF anthropologists don't excavate unofficially with Solecito, because their opinion might then be seen as biased and be discredited in a trial, Enríquez Farias says. "If the legal context doesn't exist, the anthropology goes down the drain," she says. Instead, families must request EMAF's services as expert witnesses. She hopes that together, families and EMAF can prod the state into investigating. "Our mission is to build a different kind of country."

Congram agrees that "families bringing up the dead can be a way of shaming the government to fulfill its obligations." But he thinks EMAF anthropologists could go into the field independently, as has happened in other countries. For example, a nonprofit foundation in Guatemala independently identified bodies of people who disappeared during the country's civil war. Its analyses ultimately were accepted in court.

As the workshop draws to a close, Liliana González, an anthropology student volunteering with EMAF, writes in big letters at the front of the classroom, "What is science?" People call out: "Chemistry!" "Physics!" "Anthropology!" And what are scientists looking for? "Knowledge!" That's right, Enríquez Farias says. "Science is a search for knowledge. But not just any knowledge. It has to be the truth."

García Velázquez leaves the church that weekend more determined than ever to discover her piece of that truth, starting with obtaining a copy of her case file. "The workshop was excellent," she says. The next time the state throws up an obstacle, "we'll remember what they taught us." And no matter what, she'll keep digging.



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