

America Spirit

DAUGHTERS OF THE AMERICAN REVOLUTION

MAY/JUNE 2004

Historic Trees

Love, Early
American Style

Portland, Ore.,
City of Roses

Duncan Tavern
Reborn

Nathaniel
Bowditch,
Charter
of the Seas

'Founding Mothers'

Cokie
Roberts
Unveils
the Women
of the
Revolution



Martha Washington

Features

Pressed Flowers 18

Flowers mark special times in our lives. Here's how to press blossoms to preserve them for many years

PHOTOGRAPHY BY KRISTIN BARLOWE

'Founding Mothers' 22

A new book by newswoman and political analyst Cokie Roberts examines the women of the Revolution

BY STACEY EVERS

Historic Trees 27

Survivors of storms, fires, vandals, terrorists and time, these trees bring the past to life every spring

PHOTOGRAPHY AND TEXT BY JEFF KRUEGER

The Quest for Closure 35

Researchers use DNA and traditional genealogy to reunite the remains of fallen soldiers with their families

BY MARDY FONES

For Love or Money? 40

Colonial courtships and marriages were often more about finance than romance

BY MAUREEN TAYLOR

Master Navigator 44

Nathaniel Bowditch's genius tamed the seas, saved Harvard and inspires students today

BY SHARON MCDONNELL




From Fresh
to Pressed

18-

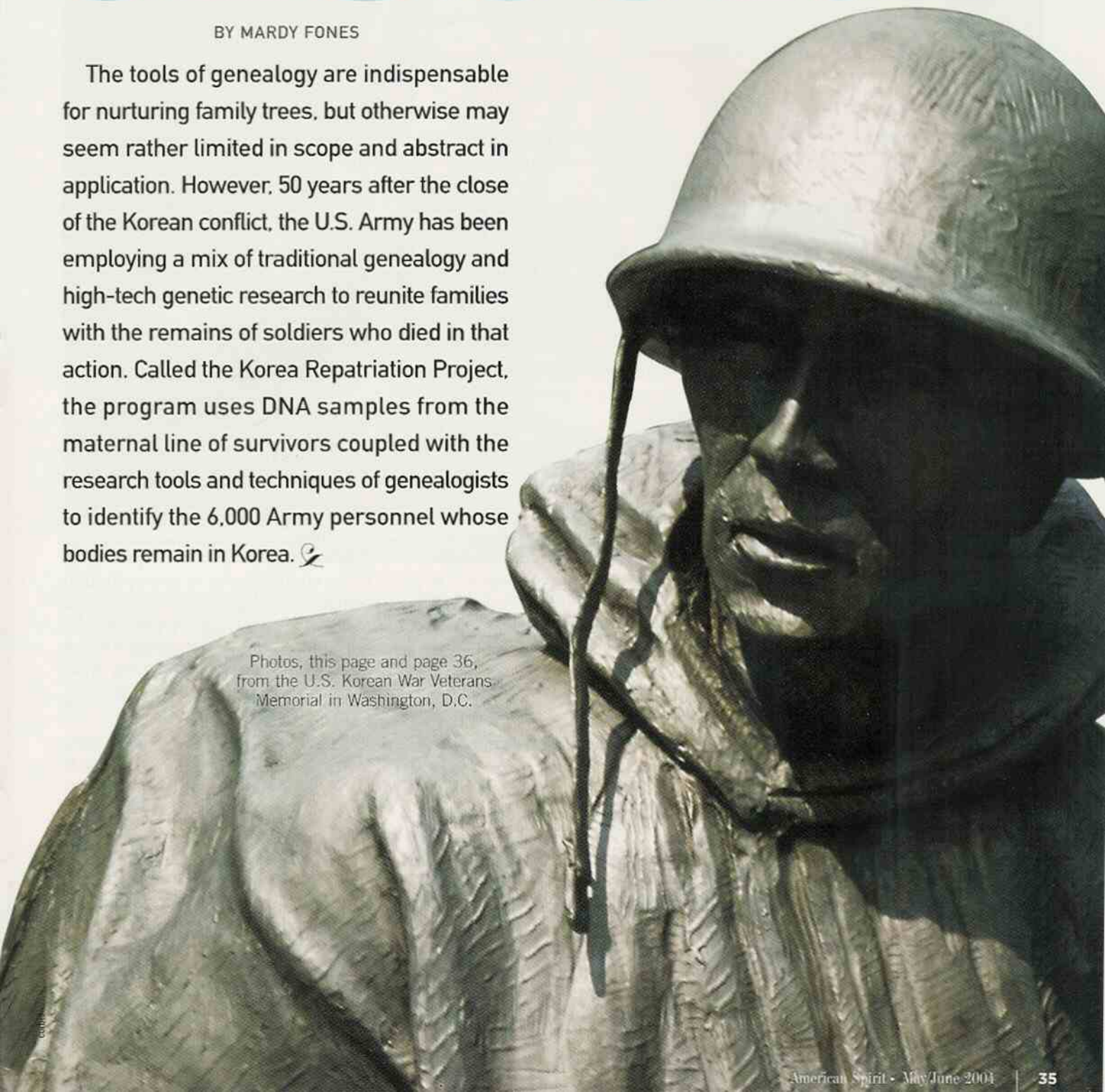
Genealogy and DNA

THE QUEST FOR CLOSURE

BY MARDY FONES

The tools of genealogy are indispensable for nurturing family trees, but otherwise may seem rather limited in scope and abstract in application. However, 50 years after the close of the Korean conflict, the U.S. Army has been employing a mix of traditional genealogy and high-tech genetic research to reunite families with the remains of soldiers who died in that action. Called the Korea Repatriation Project, the program uses DNA samples from the maternal line of survivors coupled with the research tools and techniques of genealogists to identify the 6,000 Army personnel whose bodies remain in Korea. 

Photos, this page and page 36,
from the U.S. Korean War Veterans
Memorial in Washington, D.C.



W“We have a mandate for Korea, specifically, because the government has lost touch with the families of those missing,” says Lieutenant Colonel Suzanne Walker, Director of the Army’s Repatriation and Family Affairs Division. The rationale for the Army’s Family Reference Database is complex. A half-century has passed since the end of the Korean conflict, yet political tensions have meant the bodies of many soldiers remain in North Korea. The trail is hard to follow: Families of soldiers have moved or died. Most significantly, a fire at the National Personnel Records Center in St. Louis, in 1973, destroyed about 80 percent of the medical and personnel records needed to identify those soldiers.

Left with little documentation and a trail that is 50 years cold, the Army has recruited civilian genealogists who have proven adept and resourceful allies in the search for these soldiers’ families. They use their skills with familiar genealogical resources—census records, newspaper archives, Internet searches and other databases—plus mitochondrial DNA (mtDNA) tests. The mtDNA samples are then stored and can be compared to DNA from the remains of Korean conflict soldiers when they are repatriated.

ON THE TRAIL

In the United States’ 200-plus year history, the military’s response to coping with those killed in service to their country has become increasingly sophisticated. According to Steven E. Anders, the Army’s Quartermaster Corps Historian, “Caring for our dead is a far cry today from where it was 150 years ago. There has been a continual effort to improve the techniques, equipment, doctrine and organizations to care for the dead,” he says. He points out that during the 1846–47 Mexican War, there were no bodies returned to families. “After World War II and the Korean conflict, that number rose to 78 percent. In Vietnam, 96 percent were recovered.”

Fundamentally, time is meaningless when it comes to recovering and providing appropriate burial for American war dead, says Walker. “In 1988, an excavation at Fort Erie in Canada found the remains of soldiers who fought in the Battle of 1812. Twenty-eight of those were identified

as Americans, and they were buried in a Veteran’s Administration cemetery in New York.

“When we enlist a soldier, we [promise] he will be taken care of, that we won’t leave him behind. It’s a commitment we take seriously. Right now, we have accountability for 47 percent of soldiers left behind in Korea,” says Walker. This includes remains identified by traditional forensic techniques and mtDNA. “Our goal is 100 percent recovery and identification.”

SEARCHING FOR CLUES

Megan Smolenyak is a self-professed Army brat whose passion for genealogy inspires a high degree of doggedness in her work on behalf of Korean conflict families and soldiers. She says she can put herself in the shoes of these families, because her father was a soldier. “I remember what it was like as a kid to cross off the days on the calendar until my dad came home.”

When a case packet arrives from the Army, her genealogical passion fires up. “The packet contains from two to 10 sheets of information about a soldier,” says Smolenyak, author of *Honoring Our Ancestors* (Ancestry Publishing, 2002). “I may just have a soldier’s name and his date of birth and where he enlisted, which can be a hint about where he was from.” So far, she’s found the families of 194 soldiers, or more than 94 percent of cases she’s handled. It’s like a puzzle, she says, but one that keeps changing shape. Her starting point is the 1930 census,

where she looks for mentions of these soldiers as infants. She culls and calls phone listings in communities in and around the soldiers’ towns of origin, mindful that the ’30s and ’40s saw much westward and northern migration.

She wades through marriage, birth and death records, seeking gossamer threads of connection. She recalls a case in point—the family of a soldier she was seeking in which two DNA-eligible brothers were also uncle and nephew *and* had the same middle and last name. Another man enlisted in Philadelphia, where her search began. It ended in Canada when she discovered he’d been vacationing in the United States when he enlisted.

“I did a search on one soldier’s name and came up with a [current] list of Marine promotions,” she says. “On a hunch, I called a name that was the same as the soldier whose family I was looking for. It turned out the promoted Marine was the grandson of that man.” The records themselves sometimes stymie searches. Soldiers fudged their ages. Hispanic soldiers anglicized their names. Typos or errors occur on documentation.

Therese Fisher, another researcher for the Korea project and author of *A Basic Genealogy Workbook*, describes her work as “a practical application of an abstract line of thinking. I often wake up in the middle of the night with an idea of how to solve something.”

She describes her search process as being similar to the steps required to complete a Daughters of the American Revolution application. “There has to be a clear line of descent. You can’t finish one of these cases by saying, ‘I think these people are related.’” Challenging cases demand creativity.

“There was one soldier from New York City who had a common Hispanic last name, but we couldn’t find anyone from his family,” says Fisher. Frustrated, she appealed to a Brooklyn newspaper, which published a Memorial Day story about the search. Within 48 hours, she got a call from the man’s brother, who had moved to Florida.

Some cases just call for old-fashioned legwork, says Fisher. When the trail of one search went cold in the Harlem neighborhood of New York City, the



GETTY IMAGES

researcher “went house to house explaining who he was looking for and why until he found someone who knew the family. He finally got in touch with them,” says Fisher.

Both Fisher and Smolenyak concede they can be obsessive about their searches. “I’ve returned a few cases that I couldn’t find,” says Smolenyak, who is writing a book about DNA testing and genealogy. “But in the end, I’ve asked for them back and finished them.”

“I had to turn some cases back because the trail ended at the soldier’s family’s immigration to the United States,” says Fisher. Smolenyak has used existing genealogical resources in Europe to pursue and identify soldiers’ families. “Cases have involved all sorts of obstacles—adoptions, orphan train riders, illegal

aliens, falsified documents, etc.—but if you’re stubborn enough, you can get over almost every hurdle,” she says.

THE WAITING IS OVER

Finding a soldier’s family is one thing, actually talking to them can be another. One family repeatedly hung up on Smolenyak, thinking she was a telemarketer. Many routinely screen calls with caller ID and won’t pick up because they don’t recognize Smolenyak’s number. In another case, a family member worked a swing shift and depended on voice mail. Since the genealogists believe their work is too sensitive to leave a message, they just keep calling until they get a live person on the line. Unlisted numbers and cell phone-only users are other barriers.

“I’ve called the police, I’ve called the neighbors, I’ve called other family to get the person I’m trying to reach to talk to me,” Smolenyak says. Even if the family maintains they have no relationship to the person they’re searching for, the genealogists always provide a call-back number, just in case the families later discern a link.

Once she connects with the key individual, she follows a prepared script, explaining the Army’s mtDNA Family Reference Database. Sometimes the person she’s calling has never heard of the soldier.

“So I walk them back through the family tree,” she says. Other times no DNA-eligible person from the soldier’s family is still alive. That’s when the researchers start another genealogical hunt, tracking a


family line back as much as 200 years to find a female progenitor, then forward again to a current member of that line.

"I found a 100-year-old mother who was still waiting for news about her son," says Smolenyak. "Most folks are astonished and thrilled when I call. Sometimes they cry. It's a release for them. They've been wondering all these years," says Fisher. "Our calls are like a pinhole of light that shines on 50 years of pent-up emotion."

According to Walker, when a DNA match is confirmed, the soldier's remains are entitled to full military rites. "The U.S. is unique in its persistence in finding and identifying remains," Walker says. "Those

who think we're wasting our time don't know what it's like to live with an unanswered question.

"I met a woman who was 13 when she lost a brother she idolized. At 83, she said she had missed him every day of her life. She was able to bury him in the church cemetery near her home. Through our work, she finally got resolution.

"These are real people. They had families and hope for a life that was never fulfilled," she says. "Each went off to do what his country called him to do. And they made the ultimate sacrifice. Helping to properly lay their memories to rest is the least we can do." 

The Army's Korea Repatriation Project is an ongoing effort to create a record of DNA from the maternal line of soldiers whose bodies are still in Korea. This data could be the only way the remains of some soldiers can be identified accurately.

To learn if a sample of DNA from a person in your family could help identify the repatriated remains of a soldier, contact the project at (800) 892-2490.

'Y' DNA WORKS

Understanding how genealogists can use the two most common kinds of DNA tests—Y chromosome and mitochondrial DNA (mtDNA)—means grasping the basics of genetics.

"The Y chromosome is passed intact from father to son," explains Megan Smolenyak, who is working on a DNA-related book on genetics and genealogy with fellow genealogist Ann Turner. "It conveniently follows surnames on a pedigree chart, which makes it nice and tidy for genealogical purposes."

Y chromosome studies focus on the 23rd chromosome, which determines gender. "Everyone has 22 matching pairs of chromosomes—one from each parent—but the 23rd differs," says Turner. These X and Y chromosomes determine whether a child is male (XY) or female (XX). Mothers always provide the X chromosome in her eggs. If the father provides an X, the baby will be female. If he provides a Y, then the baby is male. That's why the Y chromosome travels from father to son, she explains.

"The genetic material on the Y chromosome doesn't mix with each new generation, so it rarely changes," says Turner. "That's because all 23 chromosome pairs line up to exchange random bits and pieces of DNA with their matching partners, except the mismatched XY pair. The information carried on the Y chromosome travels from father to son as a nearly exact copy of itself."

Occasionally, mutations do occur, and they distinguish the Y chromosome of one individual from an ancestor. This leaves a genetic record of the male line over generations.

On the other hand, mtDNA exclusively tracks the maternal line, says Turner. "Mitochondria is the energy

component in all cells in the human body, and is passed from mothers to all of their children," she says. The mitochondria is located outside the cell's nucleus and has its own unique DNA. To determine mtDNA, a blood sample or cheek swab from a relative with the same maternal ancestry as the soldier's is used.

Compared to nuclear DNA, which has about 3.2 billion base pairs and is arranged in a long double helix, mtDNA has a relatively paltry 16,500 base pairs and looks like a small doughnut under the microscope, says Turner. Based on studies of mtDNA, anthropologists have determined there are about 30 distinct mtDNA groups called haplogroups, along with many sub-groups.

Matching someone on the mtDNA side indicates a common female ancestor, but the time interval to that ancestor is typically several thousand years. This, along with the challenge of following the surname changes that occur in a maternal line, means mtDNA has limited genealogical application, says Smolenyak.

Even so, she explains, it does indicate a genetic connection and can be useful for learning about migration and deep ancestry. "I have had mine checked, and it matches [the haplogroup of] 7 percent of those of European origin," says Smolenyak, "and if it happened to be rare, it could provide more insight."

Also, mtDNA is harder than the Y chromosome, so it may be used to identify old remains through the maternal line. "It was used to link the remains of the Romanovs to a living family," says Smolenyak of the Russian royal family, who were killed in 1918. Their remains were only recently found and identified with mtDNA testing. Similarly, mtDNA linked the remains of a baby found in the *Titanic* wreckage to contemporary family members. "The true strength of mtDNA is in dealing with history's mysteries," says Smolenyak. 