WASHINGTON, November 23, 2013—What do Lyme disease, bees, and face cream have in common? This is the remarkable story of Ellie Lobel, how a killer bee attack cured her Lyme disease, saved her life and inspired the first U.S.-made bee venom beauty cream.

With a photographic memory and an exceptional mind, Ellie Lobel graduated with the equivalent of a PhD in nuclear physics from University College in Kensington, England at age 18. As her career was taking off and her family was growing, at 24, she contracted Lyme disease and her life changed. Lyme disease, caused by a bacterium (Borrelia burgdorferi) transmitted through infected blacklegged tick bites, is named after the towns of Lyme and Old Lyme, Connecticut, where a number of cases were identified in 1975.

Symptoms include headache, fever, and fatigue. The characteristic "bull'seye" skin rash appears at the site of the bite in 70 to 80 percent of individuals infected, three to thirty days after the bite occurs.

If diagnosed early, Lyme disease can be treated with a short course of antibiotics; if left untreated, however, Lyme bacteria can travel through the bloodstream and establish in body tissues with potentially devastating effects.

If the disease is allowed to spread through the body, Lyme can affect the heart, nervous system, and joints. In a small percentage cases it can cause permanent, severe damage.

Complications from Lyme disease include chronic joint inflammation, especially in the knees, known as Lyme arthritis; neurological symptoms, including facial palsy, seizures and neuropathy; cognitive effects like impaired memory and concentration, disorientation, and confusion; and heart problems such as rhythm irregularities.

While almost always fully curable if treated in its first stages, Lyme disease is difficult to diagnose because of its multiplicity of symptoms and limitations of presently available blood tests. Individuals with Lyme disease are often misdiagnosed with a variety of illnesses including lupus, rheumatoid arthritis, fibromyalgia, Parkinson's disease, and a host of other ailments.

Lyme disease is concentrated heavily in the northeast and upper Midwest of the U.S. (See map).

According to initial estimates by the CDC, there were over 30,000 confirmed and probable cases of Lyme disease in the U.S. in 2012. However, in April of 2013, the CDC revised these figures, stating that as many as 300,000 Americans contract the disease every year.

An unexpected second chance

Ellie Lobel was one of the disease's chronic victims, as she was initially misdiagnosed several times with lupus, MS, chronic fatigue, and fibromyalgia. The multiple misdiagnoses allowed the Lyme bacteria time to spread through her body.

Suffering from multiple organ failure, low cell counts, and doctors telling her they had done all they could for her, after 15 years Lobel moved to California for end of life care.

"I was ready to go," Lobel says. "I was able to see my children into young adulthood and had made my peace with life."

But life had other plans for Lobel.

During her first week in California, Lobel and her caretaker were attacked by killer bees while on a short walk. This terrified Lobel, as she had been stung once as a child and had a severe allergic reaction (anaphylaxis).

Her caretaker was forced to run and look for help, but Lobel was too weak to run or even walk away from the thousands of stinging insects.

"The pain was excruciating," she told Communities. "I was terrified."

The bees finally stopped when Lobel, accepting her fate, held her body completely still. "I thought I was going to die right there," she said.

Blinded by pain, Lobel asked not to be taken to the hospital. She knew she

was going to die and did not want to do it in an unfamiliar place. She was helped back to her room and quietly waited anaphylaxis—the body's reaction to a large doses of bee venom—to take her life.

Instead of anaphylaxis, however, within a few hours of the attack she began to feel a familiar pain. Lobel was sure she was feeling the same pain associated with Lyme disease treatment, known as a Jarisch-Herxheimer reaction, that occurs when harmful bacteria inside the body die off and release endotoxins.

By the beginning of the third night, Lobel was sure she wasn't going to die. In fact, she was doing things the disease had prevented her from doing for many years.

"For the first time in years I was online, laughing and watching funny videos," she says. "By the next day, I could actually remember the words to an old song I'd heard the night before, something that I hadn't been able to do for so long."

In the days following the attack, Lobel began to feel significantly better. After living in a "mental fog" for years, where she could not concentrate, read a book, watch a movie, or even have a detailed conversation, Lobel began to regain her previously brilliant mind. Her mental changes were mirrored by a marked improvement in her physical health.

Two years after the attack, Lobel feels completely healthy. She believes that she is currently free of the disease that almost took her life two years ago.

Could bee venom cure Lyme disease?

Shortly after being able to think straight for the first time in many years, Lobel realized that there must be a link between the bee venom and the dramatic change in her health.

"I went into major research mode," Lobell recalls.

Apitherapy, the medical use of honeybee products (including honey, pollen,

propolis, royal jelly and bee venom) can be traced back to ancient Egypt, Greece and China. The healing properties of bee products are discussed in the Bible, Veda, and Quran.

Melittin, the main active component of bee venom, has been used to treat arthritis, acute and chronic pain, as well as several kinds of infections and skin diseases for centuries. Melittin is a powerful anti-inflammatory and antimicrobial agent that has also recently been shown to inhibit the HIV virus.

There is growing evidence that bee venom could also cure Lyme disease. Currently there is plenty of anecdotal and testimonial evidence of individuals using bee venom therapy to treat Lyme disease. There is even a bee venom kit for sale online. Several practitioners are starting to advocate the use of bee venom therapy to cure Lyme disease as well.

As far as studies, there are surprisingly few. However, one study, performed in 1997 by the Rocky Mountain Laboratories Microscopy Branch, a part of the National Institutes of Health (NIH) found that melittin completely incapacitated the Borrelia burgdorferi bacteria in vitro within seconds.

However, there has been no large-scale follow-up to this study.

Lobel hopes to change this and encourage more research into the uses of bee venom to treat and possibly cure chronic Lyme disease.

A critical time

Lobel says that we are currently critical time for Lyme disease as well as bee survival.

"I have personally watched hundreds of people die from this disease," she told Communities.

With the CDC revising the number of people diagnosed with Lyme disease to 10 times higher than originally reported, Lobel believes that Lyme disease and finding treatments and cures needs to become a national healthcare priority.

"This is another reason bees are so important," says Lobel. "They may hold the key to several medical mysteries."

Lobel says that this is also a vital time to focus on finding a cause and solution for colony collapse disorder, responsible for destroying 40 to 50 percent of beehives used in the U.S. agriculture industry.

Beevinty: bee venom face cream

The attack gave Lobel a new perspective on life—and bees.

Besides its medical uses, bee venom has also been used for centuries for beauty treatments. Today, as many British royals and celebrities admit to using bee venom as part of their beauty regimen, the treatment has received renewed attention.

Used as a cream or mask, the mild irritant in bee venom causes skin to react as if it had been stung. Skin reacts by increasing blood circulation to the area, producing more collagen and elastin, resulting in smoother, younger looking skin.

Bee venom is increasingly being referred to as "nature's Botox."

Harvesting bee venom was traditionally quite inhumane. Bees were either crushed or forced to sting rubber or plastic surfaces resulting in the bees' stingers getting stuck and dislodging from their bodies. Bees die when they sting if the stinger is dislodged from the body.

Today, however, the process for obtaining bee venom is said to be less invasive than harvesting honey.

In the modern method, plates with electric conductor wires are covered with cloth and placed at the entrance of the hive. As a bee lands on the plate, the wires release a mild electric current, agitating the bee and causing it to sting the cloth. The venom drops to the plate and the cloth prevents the stinger from getting stuck, allowing the bee to fly away

unharmed.

Realizing the amazing power of bee venom, Lobel has developed Beevinity, the first U.S.-produced bee venom face cream. I've been using it for almost a month and love it; you can almost feel it working. My skin feels softer and my pores have gotten a bit smaller. One added bonus is it has also helped with breakouts! The lotion is available online at Beevinity.com and makes a great gift.