

As you would suspect, many widows continued to apply to the VA for reinstatement of their benefits, only to learn for the first time that their benefits were being denied. Imagine the shock and surprise of these widows who were never notified of the change in the law, many making financial planning decisions under the mistaken assumption that they would be eligible for reinstatement if their subsequent marriage ended by death or divorce.

Mr. Speaker, my bill will reinstate DIC eligibility for widows who were remarried before November 1, 1990, and whose second or subsequent marriage is terminated by death or divorce. Recognizing the budget restraints under which Congress must operate, I initially have set the compensation rate at 50 percent of the current DIC rate. The bill would also require the Department of Veterans Affairs to notify all current and previously eligible DIC widows of the change.

I would also like to thank one of my constituents, Lt. Col. Raymond Russell—Ret. USAF—for his dedication to veterans' issues and his assistance with H.R. 2220. Lieutenant Colonel Russell is the legislative officer for the Joint Veterans Alliance of Burlington County; New Jersey State Council of Chapters—Retired Officers Association [ROA]; and Lakes and Pines Chapter—ROA.

I urge all of my colleagues to please consider supporting this bill.

WEIZMANN INSTITUTE FOR  
SCIENCE

**HON. SIDNEY R. YATES**

OF ILLINOIS

IN THE HOUSE OF REPRESENTATIVES

*Thursday, July 24, 1997*

Mr. YATES. Mr. Speaker, I rise today to share with the Members of this House an article that appeared in the July 3, 1997 edition of the USA Today concerning the new and novel research techniques that the Weizmann Institute for Science in Rehovot, Israel, has developed to help identify tumors as benign, or malignant, without invasive surgery.

Finding cancer without subjecting the individual to a traumatic procedure promises to increase the possibility of early detection and ultimately save lives.

Mr. Speaker, I ask that the full text of the article be placed in the RECORD so that my colleagues may have an opportunity to read about this revolutionary new procedure.

FINDING CANCER WITHOUT BIOPSIES

(By Steve Sternberg)

Researchers have found a novel way to peer beneath the surface of the intact human breast and tell benign lumps from malignant ones, according to a report out today.

The technique, if proven reliable in large-scale studies, promises to spare women with breast lumps the discomfort of a biopsy, during which doctors remove a bit of suspect tissue for close examination.

Although this research focuses on breast tumors, doctors say the method also may help diagnose other tumors and monitor treatment.

Hadassa Degani, lead author of a report appearing in today's *Nature Medicine*, says the method uses a standard diagnostic tool in a new way. The tool is known as magnetic resonance imaging (MRI), which detects magnetic oscillations deep within tissues.

With the help of a computer, MRI turns this information into images—a rapid sequence of them or one at a time. By taking individual frames, the researchers can obtain detailed images of the tissues' architecture, showing whether cells are densely or loosely packed and whether blood vessels are normal or riddled with leaks.

Degani, of the Weizmann Institute for Science in Rehovot, Israel, and colleagues inject the breast with a fluid that shows up in high contrast in an MRI image. They create one image before the fluid is injected and two afterward. Using three images, rather than a rapid sequence of them, guarantees clear resolution.

By carefully timing the three exposures, doctors can also observe dynamic changes as the contrast medium penetrates the breast tissues. Cancerous tissues show up as a wildly disorganized jumble of cells, with black regions of dead cells and tangles of leaky blood vessels. Normal tissues are more orderly and less compressed, with normal blood vessels.

Degani says that potentially "any abnormality can be diagnosed, monitored and assessed."

Mitchell Schnall, head of MRI at the University of Pennsylvania Medical Center, Philadelphia, praises her work. "She's done some careful studies to lay the groundwork for us to understand what we see in breast studies by MRI."

IN REMEMBRANCE OF DR. EUGENE  
SHOEMAKER AND DR. JURGEN  
RAHE

**HON. GEORGE E. BROWN, JR.**

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

*Thursday, July 24, 1997*

Mr. BROWN of California. Mr. Speaker, we have all been enthralled by the exciting images we have been receiving from the Mars Pathfinder since its successful landing on the 4th of July. I think that we all would join in congratulating the team of scientists, engineers, and managers who made this amazing mission a reality.

Yet as we celebrate another success in the ongoing exploration of space, I believe that we also need to pause to honor the memory of two individuals who are no longer with us, but who have done much to help us better understand our solar system: Dr. Eugene Shoemaker and Dr. Jurgen Rahe. We had just begun to come to terms with the tragic loss last December of Dr. Carl Sagan, the distinguished astronomer and advocate for scientific reason, and now we have lost two more gifted space scientists. We mourn their deaths, but we also celebrate their accomplishments.

Dr. Shoemaker was a distinguished geologist and discoverer or co-discoverer of some 820 asteroids and comets. Perhaps his most famous discovery was that of the Shoemaker-Levy Comet, which was discovered by him, his wife Carolyn, and Mr. David Levy. I was that comet's spectacular collision with the planet Jupiter that stirred public interest in the possibility of comets or asteroids someday impacting the Earth with disastrous consequences.

However, Dr. Shoemaker had long been concerned with the potential for such impacts from his earliest days as a scientist when he was able to demonstrate that Arizona's meteor crater was likely the result of an impact by an

asteroid. Throughout his career, he did much to increase public and scientific awareness of the potential threat posed by Earth orbit-crossing asteroids and comets, and he was a tireless champion of the need to detect and catalog those objects. I had come to rely on his insights and vision as Congress has attempted to come to grips with the public policy implications of a phenomenon that has a low probability of occurrence but that carries severe consequences for life on Earth. I shall miss him.

Dr. Rahe was also a distinguished scientist and a leading figure in NASA's solar system exploration program. I think that his impact on NASA's activities was well stated by Dr. Wesley Huntress, NASA's Associate Administrator for Space Science, when he said that under Dr. Rahe's leadership, "NASA's planetary exploration program was experiencing an almost unparalleled period of major discoveries at the same time that a number of new missions were being started and launched. His legacy to the exploration of space is large, and I like to think that Jurgen's ideas, hopes, and dreams are aboard many of the spacecraft now headed to the frontiers of our Solar System."

Both of these men were outstanding individuals in their profession. However, each also was a man with a strong sense of integrity and a love of life and of learning. Dr. Shoemaker and Dr. Rahe made the world a better place, and I know that all Members join me in expressing our deep sympathy to their families.

I include herewith obituaries of these two great scientists.

EUGENE SHOEMAKER DIES; DISCOVERED GIANT  
COMET

PHOENIX.—Eugene Shoemaker, 69, the geologist-astronomer who warned about the dangers of asteroids hitting Earth and who helped discover the giant Shoemaker-Levy 9 comet that slammed into Jupiter in 1994, died July 18 of injuries suffered in a car crash in outback Australia. He lived in Flagstaff, Ariz.

His wife, fellow Lowell Observatory astronomer Carolyn Shoemaker, suffered hip and chest injuries in the crash but was in stable condition at a hospital, authorities said. The car they were riding in collided head-on with another car on a dirt road about 310 miles north of Alice Springs, authorities said.

Dr. Shoemaker and his wife had discovered about 20 comets and 800 asteroids, but they were best known for the discovery with amateur astronomer David Levy of the comet Shoemaker-Levy 9, which broke up and smashed into Jupiter's gaseous atmosphere in 1994. The team had been searching the sky for new comets.

It was Dr. Shoemaker's fascination with asteroid impacts—such as the one that caused a Meteor Crater near his home—that drove most of his work.

A geologist by training, he was a leading expert on craters and the interplanetary collisions that caused them. He first proved to the scientific community that Meteor Crater was indeed the result of an asteroid impact, said University of Arizona planetary scientist Larry Lebofsky.

He also was the author of an influential paper in the early 1960s comparing Meteor Crater with a large crater on the moon.

Dr. Shoemaker, a Los Angeles native, was a 1947 graduate of the California Institute of Technology. He received a doctorate in geology from Princeton University. He worked for the U.S. Geological Survey from 1948 until retiring in 1993.