

**C**old fusion celebrated a 20-year milestone back in March at the American Chemical Society national meeting in Salt Lake City. To wit: In 1989, electrochemists B. Stanley Pons and Martin Fleischmann proclaimed that they had tamed the process of nuclear fusion of deuterium atoms in a test tube. The feat promised an **ENDLESS SUPPLY OF ENERGY** derived from the deuterium in seawater.

The research that sparked the announcement—which by coincidence was made in Salt Lake City—was never substantiated, and by consensus of the scientific community, the discovery was declared a bust. In 2009, humanity is still cold-fusionless.

Although cold-fusion fever subsided, it never completely went away. After a cooling-off period the faithful few researchers remaining sought a new beginning and more broadly defined their research efforts with the new moniker “low-energy nuclear reactions.” LENR practitioners have lately managed to find a home at ACS meetings in the Division of Environmental Chemistry, and in Salt Lake City they symbolically closed the 20-year circle by presenting their latest results.

One study, reported by analytical chemist Pamela A. Mosier-Boss of the Navy’s Space & Naval Warfare Systems Center, in San Diego, was publicized as the first scientific report of clear evidence for the production of highly energetic neutrons from an LENR device. These neutrons are one of the telltale signs that fusion might be taking place. But LENR scientists don’t yet have a handle on how whatever is going on goes on, nor do they have evidence that vast amounts of energy are produced or ever will be produced.

Steven B. Krivit, editor of the online publication *New Energy Times*, which has been chronicling cold-fusion/LENR research for many years, says Mosier-Boss’s study is “big,” although it might not be fusion per se. It could be some other unknown nuclear process, Krivit says.

University of Maryland physicist Robert L. Park, a longtime critic of cold fusion/LENR, says he doubts the new research is important. But he conceded for the first time in 20 years that the studies qualify as real science as opposed to some type of

pseudoscience, alchemy, or quackery.

Krivit sums up the situation like this: “The possible implications of LENR may be wonderful, terrifying, or both.”

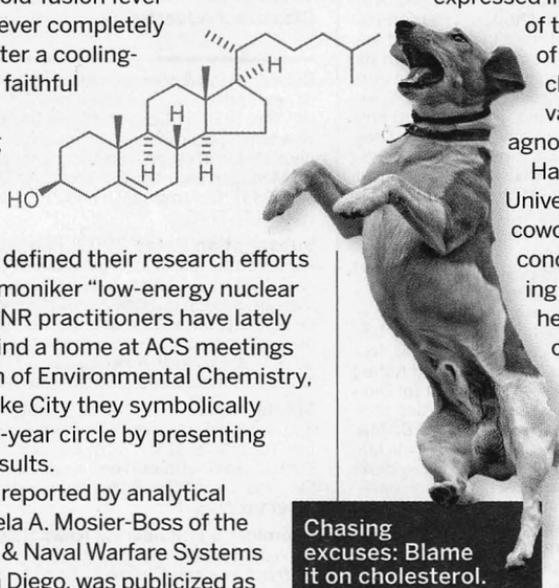
**A**s cold-fusion/LENR researchers keep chasing their dream, a team of veterinarians has reported a surprising link between **COMPULSIVE TAIL-CHASING** in dogs and high cholesterol. The study, published in the *Journal of Small Animal Practice* (2009, 50, 133), adds weight to human studies that have linked high cholesterol with panic attacks and obsessive-compulsive disorder. These errant human behaviors are possibly being expressed in dogs via episodes

of tail-chasing. The crux of these studies is that cholesterol could be a valuable biomarker to diagnose behavioral disorders.

Hasan Batmaz of Turkey’s University of Uludag and coworkers arrived at their conclusions after analyzing blood samples of 15 healthy dogs that were compulsive tail-chasers and comparing the results with blood tests of 15 dogs that rarely chased their tails. Bouts of tail-chasing are associated with anomalous dog’s life experiences such as physical trauma, surgery, or illness, the researchers note.

With regard to cholesterol, they are guessing that the lipidic steroid is gumming up the body’s plumbing system, all the way down to the cell-membrane level. This could be affecting the flow of hormones, such as serotonin, that are involved in mood and behavior.

Certain breeds of dogs, such as bull terriers and German shepherds, seem more predisposed to chasing their tails, the researchers note. And girl dogs are more obsessed than the boys. Dogs aren’t usually tested for cholesterol, and because they don’t typically hang out in fast-food joints, there hasn’t really been a compelling reason to start, until now.



Chasing excuses: Blame it on cholesterol.

**STEVE RITTER** wrote this week’s column. Please send comments and suggestions to [newscrip\*\*t\*\*s@acs.org](mailto:newscrip<b>t</b>s@acs.org).