CONSCIOUSNESS
GETTING POPULAR

At a physics meeting last October, Nobel laureate David Gross outlined 25 questions in science that he thought physics might help answer. Nestled among queries about black holes and the nature of dark matter and dark energy were questions that wandered beyond the traditional bounds of physics to venture into areas typically associated with the life sciences.

One of Gross’s questions involved human consciousness. He wondered whether scientists would ever be able to measure the onset of consciousness in infants and speculated that consciousness might be similar to what physicists call a “phase transition,” an abrupt and sudden large-scale transformation resulting from several microscopic changes.

Gross isn’t the only physicist with ideas about consciousness. Roger Penrose, a mathematical physicist at Oxford University, believes that if a “theory of everything” is ever developed in physics to explain all the known phenomena in the universe, it should at least partially account for consciousness. Penrose also believes that quantum mechanics might play an important role in consciousness.

It wasn’t that long ago that the study of consciousness was considered to be too abstract, too subjective, or too difficult to study scientifically.

But in recent years, it has emerged as one of the hottest new fields in biology, similar to string theory in physics or the search for extraterrestrial life in astronomy. No longer the sole purview of philosophers and mystics, consciousness is now attracting the attention of scientists from across a variety of different fields, each, it seems, with its own theories about what consciousness is and how it arises from the brain. Part of the mystery and excitement about consciousness is that scientists don’t know what form the final answer will take.

— from “Why Great Minds Can’t Grasp Consciousness”
by Ker Than
LiveScience.com (August 8, 2003)

HOMEOPATHIC
CONVERT?

Madeleine Ennis, a pharmacologist at Queen’s University, Belfast, was the scourge of homeopathy. She railed against its claims that a chemical remedy could be diluted to the point where a sample was unlikely to contain a single molecule of anything but water, yet still have a healing effect. Until, that is, she set out to prove once and for all that homeopathy was bunkum.

In her most recent paper, Ennis describes how her team looked at the effects of ultra-dilute solutions of histamine on human white blood cells involved in inflammation. These “basophils” release histamine when the cells are under attack. Once released, the histamine stops them releasing any more. The study, replicated in four different labs, found that homeopathic solutions—so dilute that they probably didn’t contain a single histamine molecule—worked just like histamine. Ennis might not be happy with the homeopaths’ claims, but she admits that an effect cannot be ruled out.

It remains true that no homeopathic remedy has ever been shown to work in a large randomized placebo-controlled clinical trial. But the Belfast study (Inflammation Research 53:181) suggests that something is going on.

— from “Thirteen Things That Do Not Make Sense”
by Michael Brooks
New Scientist (March 10, 2003)

A METHOD TO THE MADNESS

Intelligent design (I.D.) is not what people often assume it is. For one thing, I.D. is not Biblical literalism. Unlike earlier generations of creationists, proponents of I.D. do not believe that the universe was created in six days, that Earth is 10,000-years-old, or that the fossil record was deposited during Noah’s flood. Nor does I.D. flatly reject evolution: Adherents freely admit that some evolutionary change occurred during the history of life on Earth.