

Why Americans are flunking Science 101

BY TERRY SMILJANICH

In any future trial, O.J. Simpson's guilt or innocence may well end up turning on competing analyses of blood samples and DNA testing. A jury of Californians will be selected to weigh this scientific evidence and draw conclusions that will affect the liberty and, indeed, the life of the accused football star.

Juries across the country must make such scientific judgments on a daily basis. How well equipped are they for these weighty tasks?

Recent polls point to a dire lack of scientific literacy in the general population. While a majority of Americans say they believe in the existence of UFOs, psychic phenomena, astrology, past lives and after-death experiences, they are, at the same time, unsure of the cause of the seasons, the meaning of evolution or the significance of black holes.

And no wonder. A constant stream of books, movies and media attention pander to beliefs in the "paranormal."

Are thousands of Americans being abducted by aliens from another world and used as subjects in intergalactic sexual experiments? Dr. John Mack, a Harvard psychiatrist, thinks so and is about to publish a likely bestseller on the subject.

Is the U.S. government holding aliens from a flying saucer that crashed near Roswell, N.M., in 1947? Several bestsellers claim so, and Hollywood is about to release a new movie on the subject — "based on a true story."

At a recent conference in Seattle of the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP), hundreds of attendees heard speakers, including keynote speaker Carl Sagan, discuss these



phenomena, their believers and the state of scientific literacy in our society.

A hot topic at the conference was the current fad in "regression hypnosis," the use of hypnosis to bring out allegedly long-hidden memories, including past lives, childhood sexual abuse and abductions by aliens. There is good scientific evidence that such psychological "therapies" are often useless and may be evidence only of the susceptibility of some humans to suggestive techniques, often quite subtle. Numerous experiments have shown that some children and adults can be implemented with false memories by nothing more than gentle, but repetitive, suggestion.

Meanwhile, the sensational books keep coming and the movies keep packing them in. A person buys Dr. Mack's book on alien abductions, watches "Unsolved Mysteries" on television, reads the horoscope in the daily newspaper, consults his neighborhood psychic and watches celebrities on TV talk shows discuss their "memories" of abuse — when they were infants!

That same person then gets selected for a jury and is asked to consider competing and complex testimony about the scientific reliability of DNA "fingerprints."

A frightening thought, isn't it?

After all, scientific literacy is not just about black holes and genetic engineering. It is about the process of critical thinking and the ability to distinguish reality from fantasy. It is about the real stars in our galaxy, not football stars on the playing field.

It is not just knowledge for the sake of knowledge, but an indispensable tool for everyday life.

As we watch the events unfold in the O.J. Simpson story, let us ask ourselves if we would want jurors sitting in judgment over us to possess the faculty of critical thinking. Or would we prefer to be judged by someone who listens to the "voices" of ancient seers, psychics or even perhaps his friendly alien abductor?

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