

Design's Evolving Image



In the past few years, the chief think tank for "intelligent design"—the thinking man's creationism—has transformed its public image, as documented on the Web site of its perennial foe, the National Center for Science Education (NCSE).

The Center for the Renewal of Science and Culture, part of the Seattle-based Discovery Institute, used to have Michelangelo's God creating Adam as its logo. Then Adam turned into DNA (top).

Then God went, too, replaced by the hourglass nebula (bottom). Finally, last month, "renewal" was eliminated from the center's name.

Center spokesperson Mark Edwards explains that God was dropped because the center

is still open-minded about who might have designed the universe. And "renewal" could have a reactionary ring to it that is at odds with the center's search for brand-new insights. But NCSE says, "There is still a superfluous word in the center's name: 'Science.'"

Multiple Gene Defects Found in Clones

Amid hints by some doctors that at least one cloned baby is well on its way to birth, researchers at the Massachusetts Institute of Technology (MIT) have published a study showing that in cloned mice, defects can be found throughout the genome. The work adds to evidence that cloning to produce a baby is "completely unsafe and unethical," they say. "Most if not all would be expected to be abnormal," says study leader Rudolf Jaenisch.

The scientists compared 10,000 genes from placentas

and livers of newborn clones with those of normal mice. At least 4% were functioning incorrectly, they report in the 9 September online edition of the *Proceedings of the National Academy of Sciences*.

Research has already demonstrated a number of abnormalities in cloned mice, including obesity, pneumonia, liver failure, and pre-



Cloned mice.

mature death. Hans Schöler, a molecular biologist at the University of Pennsylvania School of Veterinary Medicine in Kennett Square, who earlier this year reported that most clones have a defect in a major gene involved in develop-

ment, says it's clear that visible symptoms are only the tip of the iceberg. Before this study, "we were just saying that on the basis of [fewer than a dozen] genes," he says. Now hundreds have been added to the list—and that's for the clones that made it to birth. For the vast majority of those that die in early gestation, "you don't know how many genes were messed up at an earlier stage," observes Schöler.

The MIT group emphasizes, however, that nuclear transfer is a safe way to cultivate genetically matched tissue for patients suffering from degenerative diseases such as Parkinson's. "No fetus has to develop, and most problems in reproductive cloning occur as a consequence of abnormal fetal development," says Jaenisch.

Ting-Kai Li, famous in alcoholism research circles for breeding ethanol-loving rats, has been named director of the National Institute on Alcohol Abuse and Alcoholism.

NIH Gets New Alcohol Chief

Li, 67, is a Chinese-born, Harvard-educated endocrinologist who has been at the Indiana University School of Medicine in Indianapolis since 1971. He also directs the Indiana Alcohol Research Center.



Ting-Kai Li

Li's rats now serve as the primary animal model in alcoholism research because they will voluntarily drink enough alcohol to become tolerant and dependent. He is also well known for fundamental work in characterizing an enzyme, aldehyde dehydrogenase, a form of which—found in many Asians—is the only known genetic protective factor against alcoholism in humans.

"I hope I would provide leadership at a very exciting time for alcoholism research," says Li, who has been a key player in two major government initiatives: a long-running study on the genetics of alcoholism, and the new transdisciplinary Integrative Neuroscience Initiative on Alcoholism.

Fellow alcoholism researchers are delighted by the appointment. "I don't think we could have done better," says psychiatrist Henri Begleiter of the State University of New York's Health Sciences Center in Brooklyn, who says Li "is probably the premier researcher in the field of alcoholism." Li, whose predecessor Enoch Gordis retired in January, will start work in November.



From Simplicity, Complexity

Daniel Reynolds didn't need his hands to produce this intricate painting. The Brooklyn, New York, artist simply poured polyurethane, tinted by enamel paint, and mineral spirits on a big piece of wood. "The paintings are engineered to make themselves," says Reynolds, who adds that even his scientist pals can't

fully explain what's going on. The work is part of a multimedia art exhibit, "Complexity," which opened 14 September and runs through 24 November at the Samuel Dorsky Museum of Art at the State University of New York, New Paltz.