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Letters

Research quality and ethics

In his report on objections to the ban on federal funding of human fetal tissue transplants, Rick Weiss quotes Fred H. Gage as saying, "None of the reasons for the ban had anything to do with bad science or good science." Dr. Gage's statement seems to imply that ethical objections are irrelevant to determining whether a given type of research is "bad science" or "good science" ("Bypassing the Ban," SN: 12/9/89, p.378).

Undoubtedly, useful knowledge can be gained by using newborn infants or legally incompetent adults as subjects for various harmful or lethal procedures; nevertheless, most would agree that such research would be "bad science" precisely because it would be unethical.

The current controversies over the use of live fetuses (who will be aborted) as experimental guinea pigs, or the use of dying or dead fetuses as organ "donors," at bottom reflect disagreement over whether individual human beings have intrinsic rights prior to birth. (I say "dying" because fetal transplant

This Week

- 132 Nightmare Numbers Surprisingly High
- 132 Health groups find consensus on fat in diet
- 133 Ringing in an estimate of a galaxy's mass
- 133 Sonochemistry: The ultrasound and the fury
- 134 Jumping gender: Frogs change from she to he
- 134 Smokers suffer from impaired smell
- 135 Laser spotlights molecular choreography
- 135 Hints of El Niño surface in Pacific Ocean

Research Notes

- 140 AAAS
- 142 AAAS
- 142 Biology
- 143 Environment
- 143 Physics

Articles

- 136 Civilization and Its Discontents
- 138 From Earth to the Moon With Love

Cover: This 19th-century woodblock print by Hiroshige is one of countless artworks reflecting Japan's long-standing enchantment with the moon. A Japanese spacecraft is now on its way to the moon, making the nation only the third to undertake such a journey. (Print from *Images From the Floating World* by Richard Lane, reprinted with permission from Tabard Press/Konecky Associates)



Departments

- 131 Letters

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proponents admit that for some transplant purposes, fetal brain tissue must be "harvested" before the fetus is brain-dead.) The administration policy against fetal tissue transplants is predicated on the recognition that each fetus is a unique, unrepeatable member of the human family. It would obviously be inconsistent with the pro-fetal-rights position to subsidize research that could create an ever-increasing societal demand for and dependence on fetal cadavers.

Douglas Johnson
Legislative Director
National Right to Life Committee, Inc.
Washington, D.C.

Gage replies that as researchers embark upon new lines of inquiry such as fetal cell research, ethical considerations are "vital" and "as critical as the scientific issues." He notes that an NIH advisory committee, convened expressly to examine the ethics of human fetal cell research, concluded last year that such research should be permitted and made eligible for federal funding. Funding decisions, Gage argues, should be based on the quality of the research — i.e., whether it's "good science" or "bad science" —

and not on the personal wishes of individual administration officials or policymakers.

— R. Weiss

The candy connection

In his headline, Jonathan Eberhart poses the question: "Does the moon spark like a Life Saver?" (SN: 12/9/89, p.375).

The answer is: Yes, the same basic phenomenon appears to be involved. Every instance cited involved flexing of the molecular structure of crystals. As has long been known, the piezoelectric effect releases a small electric current when a crystalline structure is flexed.

Somewhere buried in the archives of science is an old law, "For every action there is an equal and opposite reaction." If it is still valid and applicable to crystalline structures, the mechanical energy is converted to electrical energy. The validity of the law can be tested by equating the mechanical energy producing the stress and the electrical energy released by the strain on Life Savers, on fault structures and on the moon.

Weldon Ellis
Nashville, Tenn.

MARCH 3, 1990

131