quirements, in the face of an Administration proposal to save $67 million by reducing its intensity. (SN: 2/25) The Administration had proposed building at a lower level first, to save money, phasing up to full intensity later.

The subcommittee contends, however, that this would be more costly in the long run.

A person "does not have to be clairvoyant to predict that if a reduced intensity 200-Bev machine is built, its improvement at a later date to full intensity and scope will probably cost a great deal more than the amount presently estimated for that purpose," declares Representative Melvin Price (D-Ill.) chairman of the Subcommittee on Research of the Joint Committee.

The subcommittee also suggests that the AEC give careful study to the possibility of building the 200 Bev with the option of increasing its energy to 300 Bev or somewhat higher at a later date. It called for an AEC report to the Joint Committee on this aspect of the design by Jan. 1, 1968.

In addition, the subcommittee suggests, developments in the use of superconducting electric magnets may make it possible to easily outshine the 200 or the 300 Bev machine within the decade—creating an 800-Bev accelerator at the cost of today's 200 Bev. The subcommittee wants continued research and development conducted along this line.

Expenditures recommended by the subcommittee for the current fiscal year are $10 million in architect-engineering funds and $2.65 million for further research and development work on the facility. The AEC has named Dr. Robert R. Wilson, formerly of Cornell University, director of the 200-Bev facility.

On Ethology

After years of ignoring evolution as a force in human behavior, psychologists and psychiatrists have been gripped by the idea that some human actions and feelings may be understood in an evolutionary context.

Interest in ethology—as it is called—received a major boost last year with the publication of Konrad Lorenz's best selling book "On Aggression."

Lorenz explains human aggression as an innate evolutionary force, bred into the species from a long line of lower animals, but perverted in Homo sapiens. Man, says Lorenz, lacks the social controls of other animals, thus his incredible degree of intraspecies aggression.

Lorenz's leap from animals to man has come in for considerable criticism. Nevertheless, the interest he sparked in ethology was clearly evident at last week's American Psychiatric Association meeting in Detroit. A paper on the subject, the first of its kind at the session, drew a standing-room-only audience.

Applied to humans, ethology includes the close observation of children "in the wild"—nurseries, lying-in homes and child care institutions—says Dr. Leonard S. Zegans, professor of psychiatry at Yale University.

Dr. Zegans has tracked in detail the motor and expressive patterns children use to signal the difference between rough and tumble play and serious fighting. The cue for rough-and-tumble play, he says, appears to be an open mouthed smile with the teeth hidden, not unlike the play face used by some monkeys.

But some children cannot make these appropriate signals, says Dr. Zegans, and their behavior is misinterpreted as signaling a battle. He expects that such observations may reveal the roots of later psychopathology.

It was this kind of close observation that led Lorenz to discover the genetically determined social rites in animals like the gray-lag goose. He found stereotyped patterns for appeasement, courting, friendship and aggression that were passed down through the phyla but were changed in each species.

The goal of the child studies is to discover whether unlearned social behaviors still play a role in human development; the mock grimace might be learned, not bred.

Dr. Zegan is also chipping away at another supposedly human characteristic—the quest for territory, recently proposed as a human trait in Robert Ardrey's book, "The Territorial Imperative."

Primates are not as a rule territorial animals, says Dr. Zegans. "I just don't think we ought to make declarations about man's evolutionary behavior at this point. We must first get data on the species." But he says ethology is a tool of inestimable value.

More Cold Viruses

One handy thing about fighting the common cold: you don't have to go far to find the enemy.

Researchers at the National Institutes of Health needed only to examine nasal discharges of fellow employes to discover what appears to be a new group of viruses that cause winter sniffles.

They have added six new strains to the 100 viruses already believed to cause cold symptoms. The organisms infected 6 of 23 employes tested. All half-dozen strains showed up in December, January and February when colds are notoriously common but strangely difficult to diagnose.

To discover the strains Dr. Kenneth McIntosh and five colleagues in the National Institute of Allergy and Infectious Diseases used a research method originated in Salisbury, England.

In most common-cold research, viruses are grown on human cells in tissue culture, but the six suspect organisms resisted all attempts at such cultivation. The new method uses bits of embryonic human trachea, or windpipe, on which the viruses will grow.

The next step is to confirm the early indication that the organisms are definitely the cause of winter colds, and if they cause severe as well as mild colds in animals as well as humans.

"We need to find out if they also cause bronchitis and possibly pneumonia," Dr. McIntosh says.

MS Clue

A disease resembling multiple sclerosis has been cured in a test tube. The demonstration adds another piece of evidence that the body's own defense mechanism—its immune response—is involved in the cause of this baffling disease which afflicts anywhere from 250,000 to 500,000 Americans.

When a body is attacked by infection, according to Dr. Barry G. Arnason, a Harvard Medical School neurologist, it calls on cells known as lymphocytes to gather at the site. These cells then enlarge and divide. They engulf the bacteria and stop the disease.

Now Dr. Arnason has found that in an animal disease called experimental allergic encephalomyelitis, which is very like human multiple sclerosis, these lymphocytes destroy—instead of the enemy—the protective sheath around nerve fibers. This sheath, made of fatty tissue called myelin, surrounds the nerve fibers like insulation around an electric cable. In multiple sclerosis patients this sheath is destroyed and it is thought that this is the reason their central nervous systems are damaged.

There are three main types of lymphocyte material. They are known collectively as immuno-globulins and include the well-known gamma globulin doctors often give their patients when they have been exposed to a dangerous infection. What the Harvard scientist has found is that it seems that only one of three main types of globulin is involved in activating the lymph cells in this experimental form of multiple sclerosis. He has made an inactivator to the globulin and when he injects this into his nerve cell tissue cultures, he finds that the destructive capacity of the lymph cells is interfered with. The fatty myelin sheath remains intact. By