

# News of Science

## NSF Appropriation

The U.S. House of Representatives has approved a budget of \$115 million for the National Science Foundation, as compared with the Administration's request for \$140 million. In effecting a net reduction of \$25 million below the President's budget amount of \$140 million, the House followed the report of its Committee on Appropriations in recommending \$107 million for continuing programs (all funds requested, except \$5.3 million for research facilities) and \$8 million for "the most promising new programs."

The full request for \$40 million for grants for basic research was approved. The House specifically disallowed funds for the Southern Hemisphere astrophysics, solar research telescope, university research, reactor and computing facilities, and the optical astronomy observatory.

The full request for \$54,220,000 in support of scientific manpower under the continuing programs was approved. The request for \$27 million for new programs in this area was disapproved, though the programs were not specifically disallowed.

It is expected that there will be an effort before the Subcommittee on Independent Offices and General Government Matters of the Senate Committee on Appropriations to restore the \$25 million cut by the House. Senator Warren G. Magnuson of the state of Washington is chairman.

## The Erect Posture and the Skull

Much has been written about the position of the foramen magnum as an index for determining the posture of such fossil primates as the australopithecines of South Africa and of Neanderthal man. A recent intensive and extensive comparative study of the skulls of living primates by J. Biegert [*Morphol. Jahrb.* 98, 77 (1957)] is pertinent to this problem. Biegert concludes that changes in the skull during human phylogeny have been bound up with two evolutionary tendencies: (i) an increasing development of the brain and (ii) an increasing reduction of the masticatory apparatus.

The cranium became higher, the frontal bones elevated, and the supraorbital torus reduced as the orbits and jaws increasingly came to lie beneath the pre-sellar brain-space; and the facial profile became more orthognathous as the sagittal bending of the cranium increased. Concurrently, the foramen magnum was displaced ventrally.

Biegert therefore concludes, in opposition to Weidenreich (1924) and Clark (1955), that acquisition of the erect posture did not markedly influence the structure of the skull, but that the ventrally displaced foramen magnum is the result of changes initiated by extreme cerebral development. Thus he believes that an erect posture cannot be assigned to a fossil hominoid, such as an australopithecine, on the basis of skull structure or position of the foramen magnum. This can only be determined from the postcranial skeleton, above all, from the pelvis.—W. L. S. JR.

## Barenblatt Case and Congressional Investigations

The U.S. Supreme Court agreed on 15 April to review the case of Lloyd Barenblatt, former Vassar College psychology instructor who was convicted of contempt of Congress for refusing to answer questions by the House Un-American Activities Committee 4 years ago about alleged Communist connections. Barenblatt's case is a sequel to the Watkins case of last year.

The Court reversed the contempt conviction of union organizer John T. Watkins on grounds that the House Committee should have, but did not, tell Watkins how questions put to him were pertinent to its legislative function. At the time the Court majority also criticized the vagueness of the House resolution creating the Un-American Activities Committee and spoke of possible infringement of constitutional rights. In another case decided the same day some of the justices spoke of the need for education to be free from pressures of investigation of speech and beliefs.

The Supreme Court sent Barenblatt's conviction back to the Court of Appeals for the District of Columbia to decide

how it conformed with the Watkins decision. By a 5-4 vote the Court of Appeals in January reaffirmed the conviction. The majority held that the pertinence of questions was made clear to Barenblatt. The four dissenting justices felt that the Supreme Court had outlawed investigations in the field of education. Two of them also felt that the Court had struck down the resolution creating the House Un-American Activities Committee, thus stripping it of power to investigate anything.

Barenblatt's Supreme Court appeal asks whether or not the Court did invalidate the establishment of the Un-American Activities Committee, whether or not Congress had authorized the committee to investigate education, whether or not such an investigation is constitutional, and whether or not he was told the pertinence of questions.

Other cases raising similar questions and involving the Senate Internal Security Subcommittee and state antisubversive investigations are before or on their way to the Supreme Court.

## Television and Film Instruction

The potential benefits and dangers of secondary-school instruction by films and television are examined in a report published recently by the Advisory Board on Education and the Division of Mathematics of the National Academy of Sciences-National Research Council. Although the report, prepared by a specially appointed Film Evaluation Board, addresses itself only to films and kinescopes prepared for the teaching of mathematics, many of its observations and recommendations might be applied to other sections of the secondary-school curriculum. The report, entitled *Films and Television in Mathematics Education*, was based on a joint viewing by the board of most of the mathematics films and kinescopes now available for teaching purposes. Several days of continuous sessions were required for the assignment. The board reported that:

"There is little doubt that the more specific, more tangible needs of group instruction can be met acceptably by recorded sequences of sufficiently high quality. It is not essential, either, to sacrifice entirely the less specific, less tangible aims. A carefully prepared recorded sequence, especially done by an expert, may in fact convey healthier scientific attitudes and deeper insights than a routine classroom lecture by a teacher who is uninformed, unresponsive, or otherwise inept."

On the other hand, the board also saw the possibility of "wide dissemination of erroneous ideas and unfortunate pedagogical stereotypes."