



Australian News and Information Bureau

INSECT LIBRARY—Dr. Kenneth H. L. Key, curator, selects a grasshopper specimen from the Australian National Insect Collection, which comprises approximately one million specimens. Dozens of loans are made from the collection, a recent one being a flea collection to two Scottish entomologists who are preparing a publication with a fresh classification of Australian fleas.

MEDICINE

Is Martyrdom Ethical?

The ethics involving the use of human patients in medical experiments without their evident permission or understanding has again been questioned by a noted professor.

► THE RIGHT of researchers to make martyrs out of human beings unknowingly for the cause of science has been challenged by Dr. Henry K. Beecher, professor of research in anesthesia at Harvard University Medical School, Boston, Mass.

In a speech to a conference on the problems and complexities of clinical research sponsored by the Upjohn Company in Augusta, Mich., Dr. Beecher urged his colleagues to face up "to the ethical problems arising in great numbers in expansion of experimentation in man."

He emphasized that "what seem to be breaches of ethical conduct in experimentation are by no means rare, but are almost, one fears, universal."

This position was attacked by Dr. Thomas Chalmers, professor of medicine, Tufts Medical School, Boston, Mass., and lecturer in medicine at Harvard Medical School, who called this statement "a gross and irresponsible exaggeration."

Dr. Beecher supported his position by citing 18 random examples where human life was placed in jeopardy "without any evident permission or understanding on the part of the subject concerned and sometimes for paltry gains."

The examples used were anonymous ex-

cept for a controversial and still unresolved case involving Sloan-Kettering researchers at the Jewish Chronic Disease Hospital in Brooklyn, N.Y. The charges concerned the injection of live cancer cells into human subjects as part of a study of immunity to cancer.

According to a review in *Science*, 143: 551, 1964, this work was considered promising. However, charges have been made that the experiments were conducted without the "informed consent of the participants."

Ethical problems can also be present when a diseased patient comes to a physician for treatment even though this connotes consent for therapy, Dr. Beecher said.

The drug chloramphenicol has "long been recognized as an effective treatment for typhoid fever. To withhold this effective remedy can be a life-or-death decision," he said.

However, in one case involving 408 charity patients, 251 were treated with chloramphenicol while the other 157 were given symptomatic treatments without chloramphenicol.

In the group treated with the drug, 20 patients died. In the group in which it was withheld, 36 died. The study was done "in

order to determine the relapse rate under the two conditions of therapy," Dr. Beecher said.

Yet, according to the data presented, 23 extra patients died in the course of this study, "patients who would not have been expected to do so if they had not been denied therapy."

Evidently, these investigators believed "they had the right to choose martyrs for science, 23 of them," Dr. Beecher pointed out.

In the other examples, Dr. Beecher cited cases where nothing was said about consent or information given to parents or guardians where children were involved and to patients themselves. Yet he noted that many of these studies were published in distinguished medical journals.

Although Dr. Chalmers agreed that problems involving ethics and human experimentation needed discussion, he and Dr. David Rutstein, professor of preventive medicine at Harvard Medical School, questioned the use of anonymous examples and the interpretation given to a number of studies Dr. Beecher cited. Only with complete documentation, they said, could it be argued whether or not a treatment would benefit the patient enough to carry it out.

All three physicians recognized the problem of defining and obtaining consent. Dr. Beecher hoped that the "blunt presentation" of these examples would attract the attention of the uninformed or the thoughtless or careless, "the great majority of offenders." However, he believes that only "police action by his superiors and curbs presented by medical editors would have any effect on the offender."

Drs. Rutstein and Chalmers also suggested that this problem be taken up by individual committees that evaluate research experiments before they are conducted.

Although medical journals do not normally require a statement of consent from the subjects used in a study, Drs. Chalmers and Rutstein agree that this would be beneficial.

• *Science News Letter*, 87:214 April 3, 1965

MEDICINE

Balloon Technique Shows Cancer in Organs

► A NEW TECHNIQUE that turns the stomach and the urinary bladder into free-floating balloons shows by X-ray several common disease conditions, including cancer.

The method, developed by a team of scientists at Columbia University's College of Physicians and Surgeons, involves surrounding the organs with oxygen, filling them with gas and injecting dye into the blood vessels. Stomachs are filled with carbon dioxide; the bladders are injected with room air. Then X-ray pictures can show clearly the extent of the disease process.

Drs. Donald A. Taylor, Kevin L. Macken, Arnold L. Bachman and William B. Seaman did the research, which was reported by the American Cancer Society.

• *Science News Letter*, 87:214 April 3, 1965