The permanent international staff is located in Brussels, under the direction of Dr. M. Nicolet of Belgium. However, each country is responsible for the planning and execution of its own program, within the general outline suggested by CSAGI.

### **Data Centers**

To be of value, the mountains of data collected during the IGY by the 60,000 participating scientists must be available to all, so storing information in world data centers has been agreed upon by all participating nations.

There will be three of these centers, one in this country, one in Western Europe and another in the U.S.S.R. All IGY nations will send copies of their measurements and source records to one of these centers. There the data will be duplicated and copies forwarded to the other two.

In this way, original IGY data from all over the globe will be available in each center to scientists for research and study.

The data center in the U. S. will actually consist of 12 archives located at institutions outstanding for their work in the particular field.

Essential to U. S. participation in IGY has been the appropriation of necessary funds by Congress. The U.S. National Committee for IGY made its fund requests through the National Science Foundation, and the money was appropriated upon recommendation of the House Subcommittee on Independent Offices, of which Rep. Albert Thomas (D.-Tex.), is chairman.

One important by-product of IGY has been a step-up in the international standardization of equipment and measurements. This standardization was essential in order to get an accurate picture of the earth as a planet.

When plans for the international program were being drawn, one criterion used to decide their inclusion or exclusion was whether the observations had to be made on a world-wide basis and simultaneously. For the unique aspect of geophysics is that nature herself is the laboratory.

Neither weather, nor auroras, nor sudden electrical storms pay any heed to national boundaries. They are world-wide and cosmic events.

### **IGY Symbol**

The IGY symbol illustrates the planetwide nature of IGY. It shows the earth, half sunlit, half dark, illustrating in the simplest way the sun's influence. The South Pole is shown sunlit to emphasize the great advances IGY will bring to Antarctic knowledge. The satellite is shown to illustrate the most novel and striking of the many new instruments to be used during the IGY.

One unexpected feature of the IGY program has been the resurgence of interest in science in smaller countries around the world.

The period from July 1, 1957, to Dec. 31, 1958, was chosen for this major international effort because the sun hits a peak in its 11-year cycle of activity during this time. (See SNL, June 1, p. 346.)

The IGY program includes studies of world weather, the earth's magnetism, the aurora, the ionosphere, the sun, cosmic rays, glaciers, the oceans, earthquakes and the pull of the earth on objects near its surface as well as the better determination of latitudes and longitudes to improve our knowledge of the form, size and geography of the earth.

The IGY has been called a "great symphony of science." Scientists and politicians alike have praised the international undertaking in which so many differing nations are willingly working together in a peaceful program so beneficial to mankind

Science News Letter, June 8, 1957

**PATHOLOGY** 

# Some Skin Cancers Due To Unusual Hair Growth

➤ A COMMON type of skin cancer, called basal cell carcinoma, comes from the body's unsuccessful attempts to form hair follicles, Dr. Martin Swerdlow, Menorah Medical Center, Kansas City, Mo., reported to the International Academy of Pathology meeting in Washington.

These skin cancers have been a biological mystery because they are relatively harmless and rarely spread by metastasis even though they are closely related to other malignant cancers.

A four and one-half year study of 271 of these basal cell carcinomas has revealed the tumor nests contain skin substances and resemble all stages of hair development from embryonal germs to well-formed follicles.

Hair is an elaborately balanced structure that minor deviations can unbalance and it is vulnerable to easy derangement and possible tumor formation. The changes seen in the scalps of Hiroshima atom bomb victims support the theory that the basal cell tumors originate in hair follicles.

Science News Letter, June 8, 1957



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poses music, a circuit that is now included with every kit.

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Ronald W. of Denver, Colorado, used his Geniac to design machines giving geometric area formulas, position of the planets in the solar system, control system in an atomic reactor, comparative weights on Mars and Earth and seemed to find new uses each week in addition to those in the experimental manual.

Peter H. of River Edge, N. J., created an averaging machine.

Thousands of other people have used Geniac, the Electrical Brain Construction Kit, to explore the fascinating new world of computing machinery. Schools, colleges, industrial training programs, engineering scientists and executives who have to keep abreast of new developments find in Geniac the answer to their search for information and material to advance their knowledge of computers.

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