GENERAL SCIENCE

Science Summer Schools

Grants from National Science Foundation, industry and private foundations will allow about 2,000 science teachers to attend summer school institutes across the country.

➤ ABOUT 2,000 SCIENCE TEACHERS in all parts of the nation will attend institutes to enrich their instructional abilities at nearly 50 colleges this coming summer.

Between five percent and ten percent of the total number of high school teachers who give their major time to science teaching will have the opportunity to attend.

About half of the summer institutes are being financed by grants from the National Science Foundation. Others are supported by industry and private foundations.

The rapidly growing program, much increased this year, is expected to enhance the quality of science teaching and to be a practical aid in providing science-motivated youth for research and industry.

Some of the summer institutes will be for high school teachers and others for college teachers.

Most of the institutes will be held in June, July and August, and will run four weeks, although some run twice as long. Many teachers attending will receive stipends, and some travel and living allowances.

In many cases, credit for advanced degrees can be obtained at the institutes.

In addition, some science teachers take courses in various college summer schools to advance themselves professionally.

Sessions for high school teachers, sponsored by the National Science Foundation, will be held at:

Alabama College, Montevallo, Ala., Science American University, Washington, D. C., Physical Sciences

University of Arkansas, Fayetteville, Ark., Natural Sciences

University of Indiana, Bloomington, Ind.,

Iowa State Teachers College, Cedar Falls, Iowa, Mathematics

Marshall College, Huntington, W. Va., Physical Sciences

Montana State College, Bozeman, Mont., Chemistry

Oak Ridge Institute of Medical Studies, Oak Ridge, Tenn., Physical Sciences Pennsylvania State University, University Park,

Pa., Science
University of Rochester, Rochester, N. Y.,

Physics
University of Utah, Salt Lake City, Utah,

Biology Wesleyan University, Middletown, Conn.,

Science
Williams College, Williamstown, Mass., Mathematics

University of Wyoming, Laramie, Wyo., Physics

Institutes for high school teachers supported by other agencies will be held at:

Agricultural and Mechanical College of Texas, Texas College Station, Tex., Industry sponsored, Physics Carnegie Institute of Technology, Pittsburgh, Pa., Westinghouse sponsored, Mathematics, Physics and Chemistry

Case Institute of Technology, Cleveland, Ohio, 30 Du Pont summer fellowships, Science and Mathematics

Case Institute of Technology, Cleveland, Ohio, General Electric sponsored, Modern Physics, Electronics, Organic Chemistry, Principles of Chemistry

Colorado College, Colorado Springs, Colo., Science Teaching for Modern Society

Columbia Teachers College, New York, N. Y., 12 Du Pont summer fellowships, Science and Mathematics

Cornell University, Ithaca, N. Y., Shell sponsored, Science Teaching, Mathematics, Physics, Chemistry

University of Delaware, Newark, Del., 12 Du Pont summer fellowships, Science and Mathematics

George Washington University, Washington, D. C., Physical and Biological Sciences

Harvard University, Cambridge, Mass., 20 Du Pont summer fellowships, Science and Mathematics

Howard University, Washington, D. C., Phelps-Stokes Fund sponsored, enrollment limited to holders of Phelps-Stokes fellowships, and limited number of local teachers, Science and Mathematics

Massachusetts Institute of Technology, Cambridge, Mass., Westinghouse sponsored, Mathematics, Physics and Chemistry

University of Minnesota, Minneapolis, Minn., Hill Foundation sponsored, Mathematics, Physics and Chemistry

University of North Carolina, Raleigh, N. C., 16 Du Pont summer fellowships, Science and Mathematics

Ohio State University, Columbus, Ohio, 16 Du Pont summer fellowships, Science and Mathematics

Oregon State College, Corvallis, Ore., Crown Zellerbach Foundation sponsored, National Science Teachers Association operated, limited to Washington, Oregon, California, Idaho, Utah, Nevada and Arizona

Purdue University, Lafayette, Ind., General Electric sponsored, Modern Physics, Organic Chemistry, Principles of Chemistry

Rensselaer Polytechnic Institute, Troy, N. Y., General Electric sponsored, Modern Physics, Organic Chemistry, Principles of Chemistry

Rutgers University, New Brunswick, N. J., Science Teaching

St. Louis University, St. Louis, Mo., 16 Du Pont summer fellowships, Science and Mathe-

Stanford University, Palo Alto, Calif., Shell sponsored, Science Teaching, Mathematics, Physics and Chemistry

Syracuse University, Syracuse, N. Y., General Electric sponsored, Modern Physics, Electronics, Organic Chemistry, Principles of Chemistry

University of Texas, Austin, Tex., Science and Mathematics

Union College and University, Schenectady, N. Y., General Electric sponsored, Modern Physics and Chemistry Wesleyan University, Middletown, Conn., 12 Du Pont summer fellowships, Science and Mathematics

For college teachers, National Science Foundation supported institutes will be held at:

American Society for Engineering Educators at Argonne National Laboratory, Chicago, Ill., Nuclear Energy for Staff of Engineering Colleges

Botanical Society of America at Cornell University Ithaca N Y Botany

versity, Ithaca, N. Y., Botany Indiana University, Bloomington, Ind., Chemistry

istry
University of Michigan, Ann Arbor, Mich.,
Mathematics

Montana State College, Bozeman, Mont., Chemistry

Oak Ridge Institute of Nuclear Studies, Oak Ridge, Tenn., Physical Science Oregon State College, Corvallis, Ore., Chem-

istry
University of Utah, Salt Lake City, Utah,

Biology Williams College, Williamstown, Mass.,

Mathematics
Wisconsin State College, Eau Claire, Wis.,

Astronomy for Staff of Teachers Colleges
University of Wyoming, Laramie, Wyo.,
Physics

Science News Letter, February 25, 1956

BIOCHEMISTRY

Female Hormones Speed And Check Tissue Growth

FEMALE HORMONES both speed and check normal tissue growth, depending on whether they are acting alone or together. Latest evidence for this includes a study of the fourth and most recently discovered naturally occuring female hormone, 16-epioestriol.

The study is reported in the *Proceedings* of the Society for Experimental Biology and Medicine (Dec., 1955) by Drs. Joseph T. Velardo and Somers H. Sturgis of Harvard Medical School and Peter Bent Brigham Hospital, Boston.

The fourth female hormone was discovered just a few months ago by Drs. G. F. Marrian and W. S. Bauld of the University of Edinburgh, Scotland.

The Harvard research finding is said to have a possible bearing on both malignant and non-malignant growths.

The new hormone is found only in human females during pregnancy. It checks the normal, expected growth of the uterus in rats, restricting the activity of another female hormone, estradiol. It has very weak growth-stimulating activity.

Normal tissue growth is believed to result from a definite ratio between growth-promoting and growth-checking substances.

Besides estradiol, the two other naturally occurring female hormones known to stimulate uterine growth in rats are oestrone and oestriol. Dr. Velardo had previously found that combinations of these two and estradiol resulted in less growth than any one of them alone produced. Now he and Dr. Sturgis find that the fourth, epi-oestriol, is no exception.

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