microbiological growth curve, which is indicative of mold proliferation. Increasing concentrations of sulfanilamide increased the latent period of mold spore germination in proportion to the concentration of inhibitor used. It is significant that the respiratory rate of the control sample on the first day, before mold proliferation commenced, was the same as that of samples treated with sulfanilamide. This respiratory rate (about 33 mg. CO_2/100 grams dry matter/day) remained virtually constant for 8 days at the highest concentration of sulfanilamide and is probably representative of the true seed respiration under the conditions of moisture and temperature applied. Germination data (Table 2) indicate that suppression of mold growth by sulfanilamide yielded a larger percentage of viable seeds at the end of the trial.

TABLE 2

EFFECT OF SULFANILAMIDE ON WHEAT RESPIRATION AND ON THE MAINTENANCE OF WHEAT VIABILITY AT A MOISTURE VALUE FAVORABLE TO MOLD GROWTH*

Sulfanilamide concentration	Respiratory rate†	Germination (%)
0	428	10
1–2,000	136	57
1–1,500	114	62
1–1,000	83	69
1–500	52	82
1–250	43	84

* Wheat samples were tested for germination after 11 days in respirometers at 30° C., at a moisture value of 20 per cent. Initial germination was 94 per cent.

† Milligrams CO_2/100 grams dry matter/24 hours, on 11th day of trial.

Use of these findings is being made to determine the true respiration of wheat seeds with moisture contents as high as that required for germination. Investigation of the fungistatic effect of other organic compounds containing the sulfonamide radical is in progress. The utility of such compounds as a practical means to prevent the deterioration and heating of grain in storage is also under consideration. Results of these experiments will be published later.

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News and Notes

AAAS Meeting Notes

The Cambridge Entomological Club will hold a special meeting in conjunction with the AAAS meetings in Room B-455, Biological Laboratories, Harvard University, at 8:00 P.M. on Thursday, 26 December. The meeting will be addressed by Clarence H. Kennedy, of The Ohio State University, whose subject will be: "The Child Labor of the Termites Versus the Adult Labor of the Ant Society." An informal social gathering will follow. Visitors will be welcome.

The American Society of Parasitologists will meet in Boston in affiliation with the AAAS for a three-day program session, 26–28 December. The Statler Hotel will be the Society's official headquarters. The opening session on 26 December (2:00 P.M.) and the two sessions on 28 December (9:00 A.M., 2:00 P.M.) will be held there. Those for 27 December (9:00 A.M., 3:00 P.M.) are scheduled for Building EII, Harvard Medical School. The address of the retiring president, N. R. Stoll, on "This Wormy World," will be delivered at 11:00 A.M., 27 December. The annual luncheon and business meeting are scheduled at the Longwood Towers, Brookline, at 12:30 P.M., 27 December. The local representative of the Society is D. L. Augustine, Department of Comparative Pathology and Tropical Medicine, Harvard Medical School.

About People

Gregory Breit, professor of physics, University of Wisconsin, will become professor of physics at Yale University on 1 February 1947. Dr. Breit, a native of Russia, was National Research Council Fellow at Leiden in 1921–22 and at Harvard in 1922–23. He has served on the faculties of the University of Minnesota and New York University, and has been at the University of Wisconsin since 1934. He was resident of the Technische Hochschule in Zürich in 1928 and visiting member at the Institute for Advanced Study at Princeton in 1935–36.

Elaine Friedberg, a senior in The Ohio State University College of Pharmacy, received the Kilmer prize award, top honor for U. S. seniors in pharmacy, at the recent annual meeting of the American Pharmaceutical Association in Pittsburgh.

Victor Moritz Goldschmidt, professor of mineralogy and geology, University of Oslo, and head of the research laboratory on Mineral Raw Materials, Norwegian Ministry of Commerce, has returned to his work in Norway. He had been abroad since his arrest by the Nazis in 1942. Following his temporary release to continue his research on utilization of low-grade phosphate rocks he was again seized by the Nazis but

subsequently escaped to Britain through the aid of Norwegian patriots. While there he was made a scientific consultant to the Norwegian High Command. In connection with the Agricultural Research Council, he worked at the Macaulay Institute for Soil Research and at the Rothamsted Experimental Station. He also continued his work on the industrial use of olivine rocks for refractories, in cooperation with the Norwegian Ministry of Commerce and the Harbison-Walker Refractories Company, Pittsburgh. He was awarded the Wollaston Medal of the Geological Society for 1944. His health is now improving from the effects of the war years.

P. V. Cardon, administrator, Agricultural Research Administration, has been transferred at his own request to the position of special assistant to the chief, Bureau of Plant Industry, Soils and Agricultural Engineering. W. V. Lambert succeeds Mr. Cardon as research administrator.

Ernst Mayr, American Museum of Natural History, was awarded the Leidy Medal of the Academy of Natural Sciences, Philadelphia, on 2 October. The award is made once every three years for outstanding work in the natural sciences. Dr. Mayr is known for his research on the taxonomy and zoogeography of birds.

Roscoe R. Snapp has returned to his duties as professor of beef cattle, University of Illinois, after 57 months service in the Army, with the rank of colonel. Following the close of the war he was in charge of the work in animal husbandry at the G. I. University, Florence, Italy (see *Science,* 1946, **104,** 357–378). When that institution closed, he was with the Allied Command in Rome, directing the reorganization of the Agricultural Department of the Italian Government. Prior to his work with the G. I. University, he served with the Army in receiving rehabilitation supplies until that work was taken over by UNRRA.

Wing Cdr. K. C. Maclure, RCAF, received the Col. Thomas L. Thurlow Navigation Award at a meeting of the Institute of Navigation in Washington on 24 October. Cdr. Maclure's contributions to the science of navigation, the Institute's announcement said, include: a new system of measuring direction using the Greenwich Meridian as the datum, fixing position and the production of a polar astrograph, and a system of course checking by means of an astrocompass and polar astrograph. The award he received is a memorial to the late Col. Thurlow, U. S. Army navigation authority, inventor of the Fairchild A-10 sextant, the standard sextant for U. S. Army and Navy aerial navigators, and navigator on Howard Hughes' 1938 round-the-world flight. Cdr. Maclure was born in Montreal on 14 October 1914. In 1934 he was graduated from McGill University with a B.S.C. degree, obtaining first-class honors in mathematics and physics, and was awarded the Anne Molson gold medal for mathematics and natural philosophy. He was associate of the Actuarial Society of New York when commissioned as a navigation instructor in the RCAF in 1939. In November 1944 he became a member of the Empire Air Navigation School. While at this post he made many valuable contributions to the science of navigation, including work on consol and pressure pattern flying, and culminated his research in polar flying with his Greenwich Grid system of measuring direction and his participation in the Aries flights during 1945.

Ladislaus L. Marton has been appointed principal physicist in the Electronics Section, National Bureau of Standards. Dr. Marton was formerly associate professor of physics and headed the Division of Electron Optics at Stanford University. He will initiate a program of research on the basic theory, methods, and applications of electron and ion beam devices. The work will cover those phases of the program of the Electronics Section which involve the theory and application of scientific devices which fundamentally involve the directed flow of electron and ion beams. He will also teach a course in electron optics in the National Bureau of Standards Graduate School. Dr. Marton received his doctorate of science in 1924 from the University of Zürich, where he remained as a research associate until joining the staff at the University of Brussels as an associate professor in 1928. In 1938, Dr. Marton came to America, continuing his research in electron optics as a physicist with the RCA Manufacturing Company, Inc. In 1941 he went to Stanford.

H. C. R. Simons, known for his research work on pathogenic blood protozoa, is now in Switzerland in relatively good health, according to Walter Pilnik, Hammerstrasse 20, Zürich 8, Switzerland. In 1933 Prof. Simons, unable to return to his house in Düsseldorf, because of the Gestapo, fled to England, where he continued his research work in London and Cambridge. In 1937 he went to the Institut Pasteur, where he invented his technique in diagnosing blood protozoa by saponine-methylene blue and taurocholate methylene blue. In 1943 he was arrested by the Nazis but was liberated 48 hours before his execution by French partisans and was able to reach Switzerland. He now continues his abstracting work for *Biological Abstracts,* begun in France, and has improved his saponine-methylene blue method under not altogether favorable conditions, since Swiss regulations make it difficult for foreigners to accept paid work. His address is: Pension Plattenberg, Schönleinstrasse, Zürich.

Visitors From Abroad

C. B. Fawcett, University College, London, will be the representative of the British Association for the Advancement of Science at the AAAS meetings in Boston. Prof. Fawcett is to deliver an address on "The Numbers and Distribution of Mankind" on Monday evening, 30 December, at 8:15 P.M. in the Saunders Theatre, Harvard University. During his visit to the States, he will be accompanied by his wife. As previously announced (see *Science,* 1946, **103**, 651), he will assume his duties as visiting professor at Clark University Graduate School of Geography, Worcester, Massachusetts, on 1 February. From the last of December until that date Prof. Fawcett will be free to visit other universities.

Sir Henry Dale, London, England, delivered the 12th annual Hughlings Jackson Memorial Lecture of the Montreal Neurological Institute on 16 October. His subject was: "Chemical Transmission at Central Synapses."

Nikolaas Tinbergen, professor at the University of Leiden, arrived in this country on 13 November to give, at the invitation of several universities, a series of lectures on recent European progress in the field of animal psychology. His address will be: c/o Dr. E. Mayr, American Museum of Natural History, New York 24, New York.

Seven scientists were among the 23 internationally known scholars upon whom honorary doctorates were conferred at Princeton's 200th anniversary of the granting of its charter on 19 October. Those honored with the Doctor of Science degree were Niels Bohr, Danish physicist whose research was credited with making the atomic bomb possible; Sir Henry Hallett Dale, England, Nobel Prize winner in medicine; Sir Harold Hartley, chairman of the British European Airways, the International Executive Council, and the British National Committee of the World Power Conference; Michael Polańyi, Hungarian physicist; Linus C. Pauling, Department of Chemistry, California Institute of Technology; Cornelius B. Van Niel, The Netherlands, professor of microbiology, Stanford University; and Cyril N. H. Long, Department of Physiological Chemistry, Yale University.

Announcements

In order to coordinate assistance to the Zoological Station in Naples (see *Science,* 1946, **104**, 352) the National Research Council has established a committee consisting of D. W. Bronk (ex officio), E. G. Conklin, R. G. Harrison, E. B. Harvey, S. Hecht, L. H. Kleinholz, A. R. Moore, H. H. Plough, and E. Scharrer, chairman. The Station is in great need of publications, reprints, laboratory equipment, and apparatus. Under present arrangements income from table rents by American organizations is being used for these purposes. The cooperation of American biologists will be greatly welcomed by the committee in its efforts to assist the Naples Station in regaining its place as an international center of biological research. Also, food packages may be sent to the Station, c/o Dr. R. Dohrn, Stazione Zoologica, Villa Nazionale, Napoli, Italy, either directly or by ordering them through CARE (Cooperative for American Remittances to Europe), 50 Broad Street, New York 4, New York. The administration of the Station strives to provide meals from inadequate supplies in order to keep the staff together and to compensate for the inflationary reduction of salaries. The committee will be glad to provide information to individuals who may wish to avail themselves of the research facilities of the Station and intend to apply for the table subscribed to by the NRC. Inquiries should be directed to: E. Scharrer, Department of Anatomy, University of Colorado School of Medicine, Denver 7, Colorado.

The Graduate School of the U. S. Department of Agriculture, Washington, D. C., through its director, Lewis H. Rohrbaugh, has announced that it is sponsoring for the fall semester of its 26th academic year, a course entitled "Progress in the Field of Antibiotics." The course began on 24 September and consists of 15 weekly two-hour lectures designed to cover adequately the recent theoretical and practical advances in the study of antibiotics. Among the outstanding visiting lecturers who are participating in the course are: K. B. Raper, senior mycologist, Northern Regional Research Laboratory; Henry Welch, chief, Division of Penicillin Control and Immunology, Food and Drug Administration; Gordon O. Cragwall, director, Technical Service Department, Chas. Pfizer and Company; Robert D. Coghill, director of research, Abbott Laboratories; Rene J. Dubos, member, Rockefeller Institute for Medical Research; A. B. Crawford and J. O. Heishman, in charge, Animal Disease Station and Research in Mastitis of Cattle, respectively, Bureau of Animal Industry; O. K. Behrens, Biochemistry Department, Eli Lilly and Company; William J. Robbins, director, New York Botanical Garden; O. Wintersteiner, head, Division of Organic Chemistry, The Squibb Institute for Medical Research; S. A. Waksman, professor of microbiology, New Jersey State Agricultural Experiment Station; Karl Folkers, director of organic and biochemical research, Merck and Company; and C. S. Keefer, Evans Memorial Hospital. The course was organized and is being coordinated by H. T. Herrick and George W. Irving, Jr., Bureau of Agricultural and Industrial Chemistry, U. S. Department of Agriculture.

A staff reorganization of the Harvard College Observatory has brought about the appointment of two associate directors and the formation of a new advisory council, Dean Paul H. Buck, University provost, announced on 25 October. Bart J. Bok, who has served as associate professor of astronomy for 7 years, will become associate director under Harlow Shapley. Donald H. Menzel, professor of astrophysics and chairman of the Department of Astronomy, will become associate director for solar research. Members of the new advisory council are: Drs. Shapley, Menzel, and Bok; Cecilia Payne-Gaposchkin, Phillips astronomer; Fred L. Whipple and James G. Baker, associate professors of astronomy; and Walter O. Roberts, superintendent of the High Altitude Observatory of Harvard University and the University of Colorado, Climax, Colorado, and research associate. Matters of policy in regard to research, observations, and the accumulation of scientific data will be considered henceforth by the council. The staff reorganization, according to Dr. Shapley, director, has been made necessary by the growth of the 100-year-old observatory and the increased demands upon members of the staff.

Medical research in atmospheric environment and aviation medicine will be accelerated at the University of Illinois with the completion next summer of a new Physical Environment addition to the Research and Educational Hospitals at the Chicago Professional College Campus, Polk and Wood Streets.

A. C. Ivy, vice-president of the University, said that architects are now at work on final drawings for the new addition, a one-story structure with sufficient ceiling height to house large pressure- and temperature-controlled chambers, a large psychrometric room, and an acoustic laboratory.

Cost of the research addition will be $250,000. An additional expenditure of $250,000 will be made for the major portion of the research equipment which, because of its size, must be installed before the walls of the buildings are completed. Chief installations in the Physical Environment Building will be five pressure chambers—two for experimentation on humans and three for experimentation on animals. Dr. Ivy said.

One of the larger chambers will be cylindrical—7 feet 6 inches in diameter and 18 feet long. In it temperatures of 60° to 150° F. and simulated altitudes corresponding with heights 10 miles above sea level to depths as low as 200 feet below sea level can be created.

The second large chamber will be rectangular—$8 \times 10 \times 22$ feet. In it temperatures as low as $-60°$ F. and pressures comparable to those existing at altitudes as high as 50,000 feet above sea level and at depths as low as 30 feet below sea level can be created.

In the three animal chambers, all cylindrical and each 3 feet in diameter and 5 feet long, temperatures of 30° to 150° F. and pressures comparable to those existing at altitudes as high as 10 miles and depths as low as 200 feet below sea level can be created.

The building will be $21 \times 50 \times 156$ feet and will be constructed of steel and reinforced concrete with a brick exterior. The architectural contract has been let to Holabird and Root, Chicago architects. It is expected that construction contracts will be awarded early in 1947 and work started soon thereafter. The building will be completed in an estimated five or six months. E. P. Heckel, of E. P. Heckel and Associates, consulting mechanical engineers, Chicago, is working on the design of the chambers, psychrometric room, acoustic laboratory, and the mechanical equipment for controlling the temperature, pressure, and humidity in the various units.

The School of Mathematics, Institute for Advanced Study, will allocate a small number of stipends to gifted young mathematicians and mathematical physicists to enable them to study and to do rsearch work at Princeton during the academic year 1947–48. Candidates must have given evidence of ability in research comparable at least with that expected for the Ph.D. degree. Blanks for applications may be obtained from the School of Mathematics, Institute for Advanced Study, Princeton, New Jersey, and are returnable by 1 February 1947.

The Department of Chemistry, Northwestern University, has announced that the seminar on "Magnetism and the Structure of Catalytically Active Solids," given earlier this fall by P. W. Selwood, will be repeated beginning 16 December 1946. The response to the first seminar was so great that all registrants could not be taken; however, there are vacancies available at this time for the second session. Topics to be included at the seminar are as follows: 16 December, "General Principles of Magnetochemistry"; 17 December, "Instrumentation"; 18 December, "Free Radicals and Complex Compounds"; 19 December, "Susceptibility Isotherms"; and 20 December "Curie Point Diagrams."

Each registrant will have an opportunity to make several measurements on a variety of catalytically active solids. Assistance will be given on the interpretation of the data obtained. Registrants are invited to bring their own samples for measurement, in addition to standard samples which will be provided, such as gamma-alumina, chromia-alumina, nickel-kieselguhr, copper chromite, etc. Those who wish to bring their own samples for measurement should com-

municate with Dr. Selwood in advance. The University will be provide housing, and the registration fee, including housing, is $125. Inquiries should be addressed to Prof. Robert K. Summerbell, chairman of the Chemistry Department, Northwestern University, Evanston, Illinois.

The Columbia Broadcasting System began a 13-week series of radio discussions on Tuesday, 12 November, 6:15–6:30 P. M., EST, on "You and Alcohol." The series will provide a more exhaustive survey than previous sporadic broadcasts have accorded this subject. To acquaint the public with facts about alcohol and circumstances arising from its use as a beverage, the series will deal with social, medical, religious, legal, psychological, physiological, and other aspects of the subject.

Keynoting the programs was the initial discussion, entitled "A National Problem," by E. M. Jellinek, biometrician and director of the Section on Alcohol Studies of the Laboratory of Applied Physiology, Yale, and director of the Yale Summer School of Alcohol Studies.

Scheduled for the second and third broadcasts, 19 and 26 November, are, respectively, Henry W. Newman, Stanford University Medical School, on "Alcohol and the Human Body"; and Carney Landis, professor of psychology, Columbia University, and principal research psychologist, New York State Psychiatric Institute and Hospital.

Among other speakers scheduled for broadcasts in the "You and Alcohol" series are: Lyman Duryea, medical director of the National Research Council's Committee on Problems of Alcohol; Selden D. Bacon, Department of Sociology, Yale University; and John Riley, professor of sociology, Rutgers University. Other participants in the series are to be announced later.

Meetings

The Northwest Scientific Association will hold its next annual meeting at Spokane, Washington, on 27–28 December 1946, with R. F. Daubenmire, Department of Botany, State College of Washington, as program chairman. Officers for the present year are: H. T. Gisborne, Northern Rocky Mountain Forest and Range Experiment Station, Missoula, Montana, president; J. G. McGivern, dean, College of Engineering, Gonzaga University, Spokane, vice-president; and G. O. Baker, Department of Agronomy, University of Idaho, Moscow, secretary-treasurer. Section chairmen are: Bacteriology and Public Health, H. W. Lundy, State Department of Health, Seattle; Botany-Zoology, R. A. Dietert, Montana State University, Missoula; Chemistry-Physics-Mathematics, T. O'Leary, S. J., Gonzaga University; Engineering, Henry Gauss, University of Idaho; Forestry, K. P. Davis, Montana State University; Geology-Geography, Phil E. Church, University of Washington, Seattle; Social Science, H. Tascher, Montana State University; and Soil Conservation, J. L. Schwendiman, Soil Conservation Service, Pullman, Washington.

The Advisory Council for the Mooseheart Laboratory for Child Research will meet at Mooseheart, Illinois, on 29–30 November and 1 December. The members of the Council are: John E. Anderson, director, Institute of Child Welfare, University of Minnesota; Allan G. Brodie, head, Department of Orthodontia, University of Illinois College of Dentistry; E. W. Burgess, professor of sociology, A. J. Carlson, professor emeritus of physiology, Wilton Marion Krogman, professor of anatomy and physical anthropology, Carl R. Rogers, professor of psychology, and R. W. Tyler, chairman, Department of Education, all of the University of Chicago; H. F. Helmholz, Section of Pediatrics, Mayo Clinic; Ernest Horn, College of Education, University of Iowa; R. L. Jenkins, Department of Psychiatry, University of Illinois; C. A. Prosser, director, William Hood Dunwoody Institute, Minneapolis; and Louise Stanley, special assistant to the research administrator, U. S. Department of Agriculture.

Recent Deaths

Arthur Emanuel Hertzler, 76, professor of surgery at the University of Kansas Medical School for many years, died on 12 September. "He was the first to show that the fibrous tissue of the body is not a secretion of the connective tissue cells," as was formerly believed.

Franklin Bache, 77, great-great-great-grandson of Benjamin Franklin, and long an active member of the Franklin Institute, died on 17 September. Until his retirement 20 years ago, he was associated with coal mining companies.

Harris Perley Gould, 75, horticulturist and authority on fruit and vegetable research, died in Washington, D. C., on 17 October. Mr. Gould, who retired in July 1941 from the Department of Agriculture where he was head of the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, had served with the Department since 1 July 1901.

Melvin Dresbach, 72, professor of physiology and pharmacology, Hahnemann Medical College, and formerly professor of physiology, Albany Medical College, died on 16 October.

Wilbur B. Rayton, 61, optical enginer and director of the Scientific Bureau of Bausch & Lomb Optical

Company, died on 31 October while attending meetings of the Society of Motion Picture Engineers in San Francisco.

John Hillyer White, 66, a metallurgist with the New York Laboratories of the Bell Telephone Company for 30 years, died on 30 October.

Albert Sherman Eastman, 64, head of the Chemistry Department, University of Delaware, for 20 years, died on 4 November.

Charles S. Myers, 73, British psychologist, died on 12 October. Dr. Myers was a member of an expedition in 1898 to study the vanishing culture of the natives of the Torres Straits region. Prof. H. J. Fleure states in *The Times,* London, that: "The idea of that expedition was inspired by a vision of the unity of the sciences studying mankind socially, psychologically, and physically in the past as well as in the present. . . . Myers came back to use his experience in studying his fellow citizens in Britain, and on this basis he built up his valuable work on the guidance of young people in the choice of occupation and on industrial psychology generally." A few days before Dr. Myers' death, the National Institute of Industrial Psychology, which he had founded and of which he had served as head, celebrated its 25th anniversary. Upon this occasion, Sir Stafford Cripps stated that occupational psychology has become "the very core of our problem of production."

Letters to the Editor

Progressive Evolution

Doubt has been expressed by Aldous Huxley as to whether progress has really been of any advantage to mankind. If it isn't good for us, we want none of it, but change is inevitable, and if we don't want progressive change, we are sure to get something else which may not be any better for us. So let us inquire what we mean by progress before we throw it into the discard. Human evolution, as Julian Huxley has emphasized, is actually going on at a greatly accelerated pace in our time. We have become "consciously evolutionary," but where do we think we are going?

Evolution implies change, which may be either progressive or regressive. Progressive organic evolution may be defined as change in the direction of increase in the range and variety of adjustments of the organism to its environment. This involves increase in the complexity of structure, ensuring sensitivity to a greater variety of environing energies and more refined sensory analysis, elaboration of more varied and efficient organs of response, and more complicated apparatus of central control (nervous, vascular, endocrine, etc.). In the case of the reproductive functions, increase in complexity is in general correlated with the preceding changes in adaptation to diverse modes of life.

These progressive evolutionary changes are primarily in the interest of the individual organism—its survival and enlargement of the range of its activities, with more varied needs and satisfactions. The adaptation of a species as a whole to some particular niche of the environment may or may not be progressive; in the case of many parasites, for instance, it is regressive.

In the human realm these biological factors are operative, but they are in large measure subordinated to psychological factors of different order. Human evolution is essentially social evolution, and increasingly so. Both survival and satisfaction depend upon an efficient social organization which can be intentionally controlled. Under present conditions in a high culture this control must be by voluntary consent of a majority of the people. Control enforced by tyrannical power is unstable, and it results always in regression. Progress in this realm demands cooperative association with voluntary renunciation of some personal and group advantage and sovereignty. Our needs and desires have grown out of bounds and can be satisfied only by working harmoniously with others for mutual benefits or in lawfully ordered competitive enterprises.

At the moment we seem to be in a back-eddy of reversion to bestial standards of selfish concern for personal, group, and national advantage in disregard of social welfare and stability. This can be changed if enough of us want to and are willing to pay the price. It is fortunate that under the surface of our present disorder there is, as there always has been, a strong human craving for decency, justice, and social stability based on individual responsibility for the welfare of the group, and the group has now been enlarged to include the whole world. This key to social progress has not been lost, and it is up to all of us to recognize it and use it.

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Addendum to "Cytoplasmic Diseases and Cancer"

Since the appearance of our report (*Science,* 1945, **102**, 591), articles written by Graffi (*Z. Krebsf.,* 1939, **49**, 477; 1940, **50**, 196, 501) came to our attention. In these articles Graffi developed a theory on the derivation of viruses from mitochondria (cf. Graffi's extensive and valuable literature review) and the possible role of mutated mitochondria in the causation of neoplastic diseases, which is almost identical with the views expressed by us. Graffi developed these theories on the basis of a study in which he demonstrated that certain fluorescent carcinogens, as benzopyrene, are absorbed specifically on