

Scientific Meetings

American Bacteriologists

The 56th annual meeting of the Society of American Bacteriologists was held 28 Apr.–3 May 1956 at the Shamrock-Hilton Hotel in Houston, Texas. An attendance of more than 1500 scientists marked this first meeting of the society to be held in the Southwest. The 4-day scientific program included papers presented by more than 735 bacteriologists from the United States, Canada, England, the Netherlands, West Germany, the Philippines, Australia, Mexico, and Puerto Rico.

The scientific program featured an excellent group of ten symposia presented at afternoon and evening sessions. The symposium on "Teaching of microbiology" consisted of aspects of teaching to general, advanced, and special groups, such as nursing, dental, and medical students. The "Petroleum microbiology" symposium included reports on the role of microorganisms in corrosion and plugging of oil reservoirs, oxidation of aliphatic hydrocarbons, release of oil from oil-bearing materials, and the effects of high temperatures and great pressures, such as are found in deep wells, on microbial activity.

The symposium on "Microbial amino acids" discussed the biosynthesis of valine, isoleucine and leucine, and the aromatic ring compounds, the cleavage of heterocyclic rings, and the hydroxymethyl and formino group transfer in serine-glycine interconversion. In the symposium on "The Enterobacteriaceae," attention was confined to the isolation, identification, and pathogenic potentialities of these organisms. The "Industrial Fermentation" symposium considered methods of culture stabilization and improvement, contamination control and testing, microbiological and engineering aspects of fermentation scale-up, and the biochemical activities of the *Streptomyces*.

In the symposium on "Cellular organization in relation to function," attention was given to the organization of respiratory and phosphorylating enzymes. The enzymatic activity associated with particulate and nonparticulate fractions of *Mycobacterium tuberculosis* and their immunogenicity for mice were reported.

The role of particulates and solubilized factors in oxidative phosphorylation by bacterial extracts and their biochemical and cytological properties were discussed. The reports also included evidence for the presence of mitochondria in bacterial cells and lipid synthesis in cell-free extracts.

Antiseptics and growth factors and assay design and analyses were discussed at the "Analytical microbiology" symposium. In the symposium on "New aspects of water bacteriology," reports were made on new differential media, the use of the Millipore filter, the use of infrared spectrophotometry, a new field test for determining the sanitary quality of drinking water, and the use of chelating agents for prolonging survival of enteric bacteria in shipments of water samples.

Instead of the traditional symposium on history of bacteriology in the local area, the Texas Local Branch compiled and printed a brochure *History of Bacteriology in Texas*, which traces the development of the science from 1902 to date. This brochure was distributed to all members who attended the Houston meeting. Seminars and round-table discussions were held on "Bacterial pigments," "Rickettsial metabolism," "Immunocytochemical staining," and "Teaching of bacteriology to dental students."

The sustaining members, together with other commercial exhibitors, presented a group of 35 exhibits, including the newest types of laboratory equipment and apparatus, media and chemicals, glassware, and scientific books. The nine educational and scientific exhibits covered a wide range of interests from microbiology of burns, microbiological safety measures and apparatus, to dental microbiology and the relationships of respiratory flora of surgical personnel and wounds and surgical infections. In the respiratory flora exhibit, bacteriologists attending the meeting were invited to donate a nasal swab culture and participate in this study.

The scientific tours offered to the bacteriologists included a visit to the multi-million dollar Humble Research Laboratory and a trip through the Grand Prize Brewery. A trip through the Imperial Sugar Company's Sugarland Refinery,

where the complete process for manufacture of white, brown, and liquid sugars was on display, was offered. A tour of the Texas Medical Center was arranged. This center consists of more than 160 acres of hospitals, clinics, dental, medical, and postgraduate schools, including the M. D. Anderson Hospital and Tumor Institute, one of four such institutions in the United States.

Of the many papers of outstanding interest, only a few can be mentioned here. A. W. Hofer (New York Agricultural Experimental Station) reported on action of small seed protectants, Spergon, Arasan, and Terrachlor against *Rhizobia*, and A. J. Kluyver (The Netherlands) and W. C. Haynes *et al.* (U.S. Department of Agriculture, Peoria, Ill.) reported a chemical substance derived from *Pseudomonas aureofaciens* capable of inhibiting the growth of a number of plant pathogenic bacteria and fungi. M. A. Williams and S. C. Rittenberg (University of Southern Cal.) reported photographic evidence that certain forms of *Spirillum* found in fresh and salt waters reproduce sexually by joining together during part of their life-cycle. G. E. Mallet and H. Koffler (Purdue University) reported evidence for a molecular basis of thermal stability.

Allan Campbell (University of Michigan) and D. W. McNair Scott and E. D. DeLamater (University of Pennsylvania) reported working with synchronized cell divisions of growing cultures. Scott and DeLamater were able to show a sequence of synthesis of cell nucleic acid components and speculated that perhaps the effect of various drugs on normal and abnormal cell growth might be localized. S. H. Hutner *et al.* (Haskins Laboratories, New York) reported on the similarity of factors that cause thermal death and radiation damage with implications that measures which counteract thermal injury might also be effective in repairing radiation injury.

J. E. Middlekauff *et al.* (Southern Illinois University) reported the first evidence for gene control to cation sensitivity by showing that sensitivity to lithium is inherited in *Sacchromyces*. Werner Braun *et al.* (Rutgers University) in further studies on the effect of breakdown products of DNA, reported a selective activity for nucleic acid derivatives, and that they can produce changes *in vitro* comparable to those known to occur in susceptible hosts *in vivo*. E. M. Gianforte *et al.* (American Cyanamid Company) reported on the use of enzymatic digestion of tissues as an aid in primary isolation of bacteria and viruses from diseased tissues.

In the field of medical bacteriology and immunology, a number of reports deserve brief mention. C. C. Shepard (U.S. Public Health Service) reported on the

use of HeLa cells infected with tubercle bacilli for the assessment of antitubercular drugs. R. B. Edwards *et al.* reported on the *in vivo* and *in vitro* antibacterial activity of certain hexahydropyrimidines. W. Pelon *et al.* reported the isolation of a cytopathogenic agent from naval recruits suffering from mild respiratory illnesses. Rightsel, Dau, and McLean (Parke, Davis and Company) reported the development of a new polyvalent A.P.C. virus vaccine. G. H. Werner *et al.* (University of Pennsylvania) pinned down the viral etiology of Erythema Infectiosum, and O. C. Liu *et al.* (Sharp and Dohme Company) reported on the activity of caprochlorone on influenza virus infection in de-embryonated eggs and in mice. H. M. Powell and C. G. Culbertson (Eli Lilly and Company) reported on further studies on a new anti-rabies vaccine prepared from fixed rabies virus grown in duck egg embryos. Murphy, Eylar, Schmidt, and Syverton (University of Minnesota) reported on the survival of polio and other viruses under diverse environmental conditions. The polio virus survived in soil for 12 to 16 days.

J. T. Duff *et al.* (Fort Detrick) reported on studies on *Clostridium botulinum* toxins, the enhancement of toxicity by treatment with trypsin, and purifica-

tion and preparation of botulinum toxins. Edgar Ribí *et al.* (Rocky Mountain Laboratory USPHS) reported on results of mouse tests of various antigenic fractions of *Salmonella*, indicating that the "endotoxin" fraction may not be identical with the antigen eliciting formation of protective antibodies. Martin, Karlson, and Schatz (National Agricultural College) reported further on the biochemical properties of oral keratinolytic microflora relative to dental caries.

The 19th annual Eli Lilly research award in bacteriology and immunology went to Melvin Cohn, professor of microbiology, Washington University School of Medicine, St. Louis, Mo., for his work on induced enzyme systems. Cohn's achievements have been in studies on normal cell growth, the mechanisms of protein synthesis, studies of bacterial enzyme systems, and characterization and synthesis of antibodies. The award announcement was made at the president's reception, and the address was given at the general session of the society.

The Society of American Bacteriologists will meet in Detroit in 1957, at Purdue University in 1958, in St. Louis in 1959, in Philadelphia in 1960, and in Chicago in 1961.

E. B. M. COOK

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Forthcoming Events

July

22-27. International Cong. of Pediatrics, 8th, Copenhagen, Denmark. (Prof. Franconi, Kinderspital, Steinwiesstrasse 75, Zürich 32, Switzerland.)

22-28. International Cong. of Radiology, 8th, Mexico, D.F., Mexico. (J. Noriega, Tepic 126, 2° piso, Mexico, D.F.)

23-26. International Cong. of Developmental Biology, 1st, Providence, R.I. (J. W. Wilson, Dept. of Biology, Brown Univ., Providence.)

25-26. Methodology of the Study of Ageing, Ciba Foundation (invitational), London, England. (G. E. W. Wolstenholme, CF, 41 Portland Place, London W.1.)

25-27. Conf. on Solar-Weather Relationships sponsored by American Meteorological Soc., Boulder, Colo. (K. C. Spengler, 3 Joy St., Boston 8, Mass.)

26-28. International Conf. on Biochemical Problems of Lipids, 3rd, Brussels, Belgium. (R. Ruysen, St. Jansvest 12, Univ. of Ghent, Ghent, Belgium.)

27-28. Linguistic Soc. of America, summer, Ann Arbor, Mich. (A. H. Marckwardt, Dept. of English Language and Literature, Univ. of Michigan, Ann Arbor.)

27-31. Symposium on Cytodifferentiation (invitational), Providence, R.I. (J. W. Wilson, Dept. of Biology, Brown Univ., Providence.)

27-7. International Limnology Cong., 13th, Helsinki, Finland. (H. Luther, Snellmangatan 16 C 36, Helsinki.)

30-31. Oak Ridge Regional Symposium, 9th, Blacksburg, Va. (Information Dept., Oak Ridge Inst. of Nuclear Studies, P.O. Box 117, Oak Ridge, Tenn.)

30-4. International Physiological Cong., 20th, Brussels, Belgium. (J. J. Reuse, Faculté de Medecine, 115 Boulevard de Waterloo, Brussels.)

August

1-6. International Cong. of Human Genetics, 1st, Copenhagen, Denmark. (Secretariate, 1st ICHG, 14, Tagensvej, Copenhagen, N.)

5-10. International Conf. of Social Work, 8th, Munich, Germany. (J. R. Hoffer, 345 E. 46 St., New York 17.)

6-10. Poultry Science Assoc., annual, Raleigh, N.C. (C. B. Ryan, Dept. of Poultry Husbandry, Texas A & M College, College Station.)

6-1. International Mathematical Symposium on Algebraic Topology and Its Applications, Mexico City, Mexico. (Miss J. Silva, Instituto de Matemáticas, Torre de Ciencias, Ciudad Universitaria, México 20, D.F.)

6-8. Soc. of Automotive Engineers, national West Coast meeting, San Francisco, Calif. (Meetings Div., SAE, 29 W. 39 St., New York 18.)

9-18. International Geographical Cong., 18th, Rio de Janeiro, Brazil. (H. O'R. Sternberg, Centro de Pesquisas de Geografia do Brasil, Faculdade Nacional de Filosofia, Av. Presidente Antonio Carlos 40, Rio de Janeiro.)

10-11. Minnesota Acad. of Science, New London, Minn. (B. O. Krogstad, Univ. of Minnesota, Duluth 5B.)

(See issue of 15 June for comprehensive list)



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