1983 SPRING MEETING



TEXAS
BRANCH
AMERICAN
SOCIETY FOR
MICROBIOLOGY

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MEETING COMMITTEE

General Chairwomen and Chairman	M. R.	Goldschmidt, P.Jurtshuk,
Announcement and Call		- Tito i mari
for Papers	R.	Hopfer, J. Clarridge
Program Printing and Mailing.	J.	Bednarz-Prashad
Exhibit Space	В.	Whi tton
Registration	S.	Fadulu, P. Jurtshuk
Symposia and Conveners	T.	Matnev
Social Hour	C.	Stager
fund Raising	L.	Phillips
Transportation	Μ.	Mandel

The Texas Branch of the American Society for Microbiology acknowledges the cosponsorship by the Natural Science Department of the Downtown Campus of The University of Houston, and by the Department of Biology, University of Houston, Central Campus.

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All attendees and their guests are urged to support the sustaining members and to visit the exhibits in Terrace D.

THURSDAY and FRIDAY

1:00-5:00 p.m. February 10 8:00-4:00 p.m. February 11

CLINICAL MICROBIOLOGY WORKSHOP: "Non-fermentative Gram Negative Bacteria"

A workshop on the non-fermentative Gram-negative bacteria will be held on the 8th floor, Natural Science Department, Downtown Campus University of Houston (1 block from Headquarters). The workshop is presented by The Texas State Department of Health. Fees for the workshop are \$35.00. Enrollment is limited to 20. The \$35.00 will include admission to the social hour and all other sessions. MAKE CHECK PAYABLE TO THE TEXAS BRANCH ASM and send to Millicent Goldschmidt, Ph.D., Dental Science Institute, The University of Texas Health Science Center at Houston, P.O. Box 20068, Houston, Texas 77025.

Register first at Headquarters 12:00 noon - 1:00 p.m., February 10.

THURS DAY

February 10, 1983

2:00-5:00 p.m. Executive meeting, Board Room

5:00-7:30 p.m. Registration, outside Terrace A & B

7:00-10:15 p.m. The <u>Eugene P. Goldschmidt Memorial Symposium on Microbial Genetics:</u>

Terrace A & R

"Various Extensions and Applications of Microbial Genetics"

Convener: Thomas S. Matney, The University of Texas at Houston, Graduate School of Biomedical Sciences

Speakers:

- 7:00 p.m. Philip E. Hartman, Ph.D., Department of Biology, The Johns Hopkins University, Baltimore, MD "Bacteria as detectors of mutagens/ carcinogens and of antimutagens/ anticarcinogens."
- 7:45 p.m. Michael J. Siciliano, Ph.D., Department of Genetics, M.D. Anderson Hospital and Tumor Institute, Houston Texas "Mammalian cell mutagenesis."
- 8:30 p.m. Coffee Break
- 8:45 p.m. Stephen P. Daiger, Ph.D., Center for Population Genetics and Demography, The University of Texas-Graduate School of Biomedical Sciences, Houston, Texas-"Use of recombinant DNA probes in human genetics."
- 9:30 p.m. James P. Allison, Ph.D., Research Division, Science Park, The University of Texas System Cancer Center, Smithville, Texas "Monoclonal antibodies as probes for surface alterations during carcinogenesis."

FRIDAY MORNING February 11, 1983 Terrace A GENERAL MICROBIOLOGY: SESSION #1

CONVENER: Dr. Peter Jurtshuk, University of Houston

- 8:45 "The Role of Oxygen in Bacterial Metabolism". P. Jurtshuk, The University of Houston, Central Campus.
- 9:15 G-I "The Influence of Two Herbicides on Nitrogen-Fixation in Azotobacter Species." Helen L. Coleman*and R.D. Humphrey,
- 9:30 G-2 "The Influence of Two Herbicides on Rhizobium Infected Legume Root Callus Cultures." Evelyn P. Rials* and R.D. Humphrey, Prairie View A & M.
- 9:45 G-3 "Terminal Oxidase Analyses on Cells of Thermophilic and Mesophilic <u>Bacillus</u> Species." Jong-Kang Liu* and Peter Jurtshuk, Jr., The University of Houston, Central Campus.
- 10:00 G-4 "Properties of a Lysosomal Proteinase Isolated from Physarum. "Hiltrud U. White* and Henry R. Henney, Jr., The University of Houston, Central Campus.
- 10:15 Coffee Break with the exhibitors, Terrace D.
- 10:45 G-5 "Analyses on the Superoxide Dismutases Present in <u>Azotobacter vinelandii</u> and the Related Free-living Nitrogen-fixing Bacteria." Edward R.B. Moore*, Peter Jurtshuk, Jr. and E. Pinina Norrod, The University of Houston, Central Campus.
- 11:00 G-6 "Siderophores and Iron Regulated Proteins in <u>Vibrio</u> and <u>Aeromonas</u> Species." Candye R. Andrus* and Shelley M. Payne, The University of Texas at Austin.
- 11:15 G-7 "Characterization of Iron Transport Mutants of <u>Shigella flexneri</u>." Kathleen M. Lawlor* and S.M. Payne, University of Texas, Austin.
- 11:30 G-8 "Purification and Characterization of a Long-Chain Acy1-CoA Thioesterase from Rhodopseudomonas sphaeroides." Stephen G. Boyce* and Donald R. Leuking, Texas A & M University.
- 11:45 G-9 "Characterization of a Photorelaxed Mutant of Rhodopseudomonas sphaeroides." Maria R. Acosta* and Donald R. Leuking, Texas

^{8:00} a.m.-12:00 noon Registration

Denotes a student presentation.

FRIDAY MORNING February 11, 1983 Terrace B MEDICAL MICROBIOLOGY: SESSION #1

- CONVENER: Dr. Johnny Peterson, University of Texas Medical Branch. Galveston
- 8:45 "Pathogenesis of Salmonellosis". J. Peterson, University of Texas Medical Branch, Galveston, Texas
- 9:15 M-1 "Characterization of Toxic Extracellular Products Isolated from Aeromonas hydrophila." J.D. Campbell; C.W. Houston and F.C.W. Koo, University of Texas Medical Branch, Galveston, Texas.
- 9:30 M-2 "Properties of the Heat-Labile Antigen of <u>Campylobacter jejuni</u>."
 G.E. Buck*, J.S. Smith and K.A. Parshall. University of Texas
 Medical Branch. Galveston. Texas.
- 9:45 M-3 "Detection of Escherichia coli Heat-Labile Enterotoxin (LT) in Stools by Counter-Immunoelectrophoresis (CIE), Enzyme-Linked Immunosorbent Assay (ELISA) and Y1 Adrenal Cell (YAC) Assay."

 Donna M. Jansen * and Herbert L. DuPont, University of Texas Medical School, Houston, Texas.
- 10:00 M-4 "In vitro cultivation of Treponema pallidum." Steven J. Norris, University of Texas Medical School at Houston.
- 10:15 M-5 "Improved Methods for Culturing Normal Human Epithelial Cells and Human Tumor Cells." Mary Pat Moyer, The University of Texas Health Science Center at San Antonio, Texas.
- 10:30 Coffee Break with the exhibitors, Terrace D.
- 11:00 M-6 "Treatment of Murine Disseminated Candidiasis with Liposome Encapsulated Amphotericin B." G. Lopez-Berestein, R. Mehta, R. Hopfer, K. Mehta, L. Kasi, K. Mills, E. Hersh, M. Luna, V. Fainstein and R. Juliano. M.D. Anderson Hospital and Tumor Institute and The University of Texas Medical School, Houston, T.
- 11:15 M-7 "Distribution of In 111 Candida albicans in Mice." L. Kasi, G. Lopez-Berestein, R. Hopfer, K. Mills, M. Jahns, I. Teckemeyer, H. Glenn, and T. Haynie. M.D. Anderson Hospital and Tumor Institute, Houston, TX.
- 11:30 M-8 "In vitro Susceptibility Testing of Candida albicans Using Liposome Encapsulated Amphotericin B." K. Mills, R. Hopfer, G. Lopez-Berestein, R. Mehta, V. Fainstein, and R. Juliano. M.D. Anderson Hospital and Tumor Institute and The University of Texas Medical School at Houston. TX.
- 11:45 M-9 "Chemiluminescence Nitrogen Analysis as a Measure of Growth and Growth Rate of Cariogenic Streptococcal Organisms." Pratibah A. Desai,*Chala Sargent, Sunday O. Fadulu, Department of Biology Texas Southern University, Houston, TX. and Millicent Goldschmit, The University of Texas Health Science Center at Houston, Dentai Science Institute, Houston, TX.

FRIDAY AFTERNOON February 11, 1983 Terrace A

GENERAL MICROBIOLOGY: SESSION #2

- CONVENER: Dr. Emanuel J. Murgola, The University of Texas M.D. Anderson Hospital and Tumor Institute, Houston.
- 1:15 "Caveat Adaptor: tRNA's Frame of Mind." Emanuel J. Murgola, University of Texas M.D.Anderson Hospital and Tumor Institute, Houston.
- 1:45 G-10 "A Comparison of Contagious Ecthyma Virus Genomes by Restriction Endonucleases." Fatemen Rafii and Dieter Burger, Washington State University.
- 2:00 G-11 "Analysis of the Structure and the Transcriptional Organization of the glpKF Operon of E. coli K12." Charles A. Conrad* and James R. Jöhnson, Texas \overline{A} & \overline{M} University.
- 2:15 G-12 "Cloning and Expression of the N⁵, N¹⁰ -Methylenetetrahydrofolate Reductase Gene (metF) of E. coli K 12 in Various Genetic Backgrounds." James R. Johnson, Mary E. Treat and Mark R. Emmett, Texas A & M University.
- 2:30 Coffee Break with the exhibitors, Terrace D.
- 3:00 G-13 "Deletion Analysis of the metJB Component of the metJBLF Gene Cluster of E. coli K12." Olin K. Fearing* and James R. Johnson, Texas A & M University.
- 3:15 G-14 "Use of Hemizygous E. coli Derivatives to Identify Chemically Induced Base-Pair Substitutions in DNA." J.L. Laidlaw, M.A. Butler and T.S. Matney, The University of Texas Health Science Center at Houston Graduate School of Biomedical Sciences.
- 3:30 G-15 "The Genetics of Phage Lysis." Greg Neal*, Jinnie Garrett, Keyin Young, Ray Grimaila and Ry Young, Texas A & M University.
- 3:45 G-16 "Cell Wall Deficient Forms of <u>Listeria monocytogenes</u>." Carl A. Beson* and Clarence L. Baugh, Texas Tech University.

^{8:00} a.m. - 12:00 noon Registration

^{*} Denotes a student presentation.

FRIDAY AFTERNOON February 11, 1983 Terrace B

CLINICAL MICROBIOLOGY: SESSION #T

CONVENER: Dr. Jill Clarridge, V.A. Medical Center, Houston and Dr. Roy Hopfer, M.D. Anderson Hospital and Tumor Institute, Houston.

- 1:15 "Less Identification, More Evaluation." J. Clarridge, V.A. Medical Center, Houston.
- 1:30 C-1 "Rapid Identification of Bacteria Using a Methyl-Umbelliferone Fluorescense Assay." Richard Chamblin* and John M. Quarles, Texas A & M University.
- 1:45 C-2 "Routine Use of Bactec 16B Bottles for Detecting Septicemia in Leukemia Patients." R. Hopfer, V. Fainstein, S. Watkins, M. Wenglar and D. Moore, M.D. Anderson Hospital and Tumor Institute, Houston.
- 2:00 C-3 "Evaluation of the Automicrobic System GSC Plus Card." W.F. Nauschentz, Brooke Army Medical Center, Fort Sam Houston.
- 2:15 C-4 "Evaluation of Virocult." Thomas R. Perez*, Paula L. Mosman and S. Vern Juchau, Brooke Army Medical Center, Fort Sam Houston.
- 2:30 Coffee Break with the exhibitors, Terrace D. (NOTE: 15 min. break,
- 2:45 C-5 "Bacterial Effect of Clorox^R on Split-Thickness Skin Infected with Bacteria and Yeast." R.E. Fader*, A. Mayrer, M.D. Stein, and D.N. Herndon, University Texas Medical Branch at Galveston.
- 3:00 C-6 "Occurrence of Bacterial Enteropathogens in Foods from Mexico."
 L. E. Ferguson* and L.V. Wood, University of Texas Medical School.
- 3:15 C-7 "Occurrence of Enteric Adenovirus in Children in Day Care Centers.* Paul Shirley*, Bruce H. Keswick, W.E. Woodward, L.K. Pickering and H.L. DuPont, University of Texas Medical School, Houston.
- 3:30 C-8 "Nutritional Deficiency Expressed as Drug Dependency in a Strain of Enterococcus." M. Wenglar, L. Allen, and R. Hopfer, M.D. Anderson Hospital and Tumor Institute, Houston.
- 3:45 C-9 "The Clinical Significance of <u>Campylobacter</u> Cultures in Adults.* N. Tabibian, J.E. Clarridge, Veteran's Administration Medical Center, Houston, Texas.

^{8:00} a.m. - 12:00 noon Registration

^{*} Denotes a student presentation.

FRIDAY AFTERNOON AND EVENING February 11, 1983

4:30 P.M. I.M. LEWIS LECTURE IN TERRACE A & B

Introduction of the I.M. Lewis Lecturer
by
William C. McDonald, Ph.D.
President, Texas Branch, ASM

I.M. Lewis Lecture:

"Bacterial Reduction of Nitrate Key to a gastric Cancer Epidemic in the United States?"

by
Philip E. Hartman, Ph.D.
Department of Biology
The Johns Hopkins University
Baltimore, Maryland

5:30 P.M. Social Hour (Free to Registrants)

at
The Spaghetti Warehouse (2nd floor)
901 Commerce Street (at Travis)
There will be complimentary beer and light
snacks. A cash bar will be available for
mixed drinks.

After 6:30 P.M. Dinner

The Social Hour will be followed by a spaghetti dinner at the Spaghetti Warehouse. The tickets for the dinner are \$5.00. They may be purchased at the Registration Desk until 12:00 noon on Friday, February 11. Only 100 tickets will be available.

SATURDAY MORNING February 12, 1983 Terrace A

GENERAL MICROBIOLOGY: SESSION #3

CONVENER: Dr. M. Mandel, Doctor's Center, Houston, Texas.

- 9:00 "What's in Name?" Manley Mandel, Doctor's Center, Houston.
- 9:30 G-17 "Radiation Sensitive Mutants of the Nematode <u>£aenorhabditis</u> <u>elegans</u>: Effects of Age and Parental Genotype on <u>Radiation</u> Sensitivity." Philip S. Hartman, Texas Christian University, Ft. Worth.
- 9:45 G-18 "Repair of UV Irradiated DNA in the Nematode <u>Caenorhabditis</u>
 elegans as Measured by Alkaline Gel Electrophoresis." Katy M.
 Lowery and Philip S. Hartman, Texas Christian University, Ft. worth.
- 10:00 G-19 "Microwave Irradiation of <u>Escherichia coli</u> Produces Phenotypic Changes." James M. Richardson*, James W. Frazer, and Rex C. Moyer, Trinity University and University of Texas Health Science Center, San Antonio.
- 10:15 Coffee Break with the exhibitors, Terrace D.
- 10:45 G-20 "Field Studies on Virus Association with Solids in a Polluted Estuary ." C. Chalapati Rao, K.M. Seidel, T.G. Metcalf and J.L. Melnick, Baylor College of Medicine, Houston.
- 11:00 G-21 "Comparative Genotoxicity of Antineoplastic Drugs." T.V. Nguyen*, J.C. Theiss, T.H. Connor, and T.S. Matney. The University of Texas Health Science Center at Houston, School of Public Health and Graduate School of Biomedical Sciences.
- 11:15 G-22 "Use of a TLC-Overlay Technique to Assay Urine Samples of Formalin-Exposed Individuals for Genotoxic Substances." T.H. Comnor, J.C. Theiss and T.S. Matney, The University of Texas Health Science Center at Houston, School of Public Health and Graduate School of Biomedical Sciences.
- 11:30 G-23 "Spore-forming Bacteria that Inhibit the Root-Rot Fungus Pythium graminicola." John B. Sutherland, Heather M. Hawthorne, and Diame L. Sloan, Texas Tech University, Lubbock.
- 12:00 IMPORTANT BRANCH BUSINESS MEETING IN SEMINAR CENTER (on 1st Floor).

^{8:00} a.m. - 9:00 a.m. Registration
* Denotes a student presentation.

SATURDAY MORNING February 12, 1983 Terrace B

MEDICAL MICRORIOLOGY: SESSION #2

- CONVENER: A. Joanne Becharz-Prashad, The University of Texas Medical School at Houston.
- 9:15 "Pathogenesis of Rotaviruses." A. J. Bednarz Prashad, The University of Texas Medical School at Houston.
- 9:45 M-10 "Human Cytomegalovirus Induced nuclear Inclusions: Comparison of Wild and Adapted Strains." M. Fons*, K. Graves, and T. Albrecht, University of Texas Medical Branch, Galveston.
- 10:00 M-11 "Cytomegaly, Although a Late Event, Results from an Early CMV Function." M.A. Nokta, D.J. Speelman, and T. Albrecht, University of Texas Medical Branch at Galveston.
- 10:15 M-12 "Mechanism of Action of Virus-Type Interferon (IFN α/β): The Use of Antimetabolites to Study the Development of the Antiviral State. J.M. Rose*, C.K. Crowley, and W.R. Fleischmann, Jr., University of Texas Medical Branch, Galveston.
- 10:30 Coffee Break with the exhibitors, Terrace D.
- 11:00 M-13 "Potentiation of the Antiviral Action of Interferon: A Mutually Synergistic Interaction of the Interferons." L.A. Schwarz* and W.A. Fleischmann, Jr., The University of Texas Medical Branch, Galveston.
- 11:15 M-14 "Induction of Gamma Interferon by <u>Streptococcus pneumoniae</u>.
 T.L.Huff*, D.A. Weigent, J.W. Peterson, G.J. Stanton, and S. Baron,
 University of Texas Medical Branch at Galveston.
- 11:30 M-15 "A Comparative Study of <u>Histoplasma</u> Antigen and Specific Hyper and Hypotensive Drugs in <u>Mongrel Dogs</u>." D.L. Mayes*, S.O. Fadula, and E.J. Eugere, Texas Southern University, Houston.
- 11:45 M416 "Inhibition of IgA Release from Human Colostral Leukocytes by Cytochalasin B." E.A. Weaver*, R.M. Goldblum, C.P. Davis and A.S. Goldman. Departments of Microbiology and Pediatrics, University of Texas Medical Branch, Galveston.
- 12:00 IMPORTANT BRANCH BUSINESS MEETING IN SEMINAR CENTER (on 1st Floor)

^{8:00} a.m. - 9:00 a.m. Registration

^{*} Denotes a student presentation.

SATURDAY MORNING February 12, 1983

Terrace C 8:30 a.m.-11:45 a.m.

CLINICAL MICROBIOLOGY SYMPOSIUM

"Clinical Significance and Procedures for Identification of Aerobic and Anaerobic Gram Positive Bacilli"

8:30 a.m. Dr. Geoffrey A. Land
Director, Clinical Microbiology
Methodist Hospitals
Dallas, Texas

LECTURE I

I. Clinical ManifestationsA. Predisposing FactorsB. Clinical States

II. Epidemiology

III. Treatment
IV. Serology

A. Tests

B. Disease Assessment

10:00 a.m. Coffee Break with the exhibitors in Terrace D

10:15 a.m. Dr. Joseph Stenick Chief, Microbiology University of Cincinnati Medical Center Cincinnati, Ohio

LECTURE II

I. Specimens, Methods of Collection and Transport

II. Direct Examination of Specimens

III. Culture and Isolation

IV. Identification

A. Cell Wall Structure Biochemistry

B. Taxonomic Division According to Cell Wall Constituents

. Thin-layer Chromatography

D. Laboratory Identification Strategies

E. Identification by Microscopic Morphology on Minimal Media and Selected Biochemics

V. Susceptibility Testing: Nocardia

12:00 noon

IMPORTANT TEXAS BRANCH BUSINESS MEETING
IN SEMINAR CENTER (on First Floor)

A.J.Bednarz-Prashad
Program in Infectious Diseases and
Clinical Microbiology
The University of Texas Medical
School at Houston
Houston, Texas 77025

Texas Branch, A.S.M.
Spring Meeting 1983
The University of Houston
Downtown College Center
101 Main Street
Houston, Texas

Registration:

February 10, 1983 5:00-7:30 p.m. February 11, 1983 8:00-12:00 noon February 12, 1983 8:00-9:00 a.m.