

FALL

MEETING 1984

GALVESTON

Texas Branch

American Society

for Microbiology

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Exhibit.....Johnny W. Peterson
Registration and Program.....Felix Koo
Clinical Symposium.....George Buck
Host Defense Symposium.....David Niesel
Audio-Visual.....Clifford Houston
Entertainment and Social Hour.....Robert C. Fader
DNA Sequencing Workshop.....David Niesel
Poster Sessions.....James C. Reitmeyer

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SUPPORT YOUR SUSTAINING MEMBERS
AND VISIT THEIR EXHIBITS.
(Ballroom Salon C)

ACKNOWLEDGEMENTS

We thank the Dean of Medicine, Chairman of the Department of Microbiology, The University of Texas Medical Branch, Galveston and the following sustaining members for their generous support of this meeting.

ICN Biomedicals, Inc.
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THURSDAY

September 20, 1984

EXECUTIVE COMMITTEE MEETING

2:00 - 5:00 p.m.

Executive Boardroom, 2nd Floor

REGISTRATION

St. Luis Hotel Ballroom Lobby

4:00 - 7:00 p.m.

SYMPOSIUM

Ballroom Salons A & B

7:00 - 10:00 p.m.

Host Defenses Against the Major Categories of
Microorganisms

Convener: Samuel Baron, M.D.

- 7:00 - 7:05 Introductory Remarks, Samuel Baron, M.D.
- 7:05 - 7:40 Host Defenses Against Viruses
Samuel Baron, M.D., University of Texas
Medical Branch, Galveston, Texas.
- 7:40 - 8:15 Host Defenses Against Bacteria
L. Joe Berry, Ph.D., University of Texas,
Austin, Texas.

- 8:15 - 8:45 COFFEE BREAK
- 8:45 - 9:20 Host Defenses Against Fungi
Juneann Murphy, Ph.D.
University of Oklahoma, Norman, Oklahoma.
- 9:20 - 9:55 Host Defenses Against Parasites
Stephen P. Katz, Ph.D.
Tulane University, New Orleans, Louisiana

FRIDAY MORNING

September 21, 1984

Ballroom Salon A

GENERAL MICROBIOLOGY SESSION I

Convener: Peter Jurtshuk, Ph.D.

- 8:30 Carbohydrate Influence on Adherence by Streptococcus mitans. LISA WILLIAMS** and RONALD D. HUMPHREY. Department of Biology, Prairie View A&M University, Prairie View, Texas.
- 8:45 The Influence of Dextran Sulphate on Cellular Immune Responses in BALB/c Mice Challenged with Heat-Killed Listeria monocytogenes. D. M. MAGEE** and B. G. FOSTER. Department of Biology, Texas A&M University, College Station, Texas.
- 9:00 Incidence and Health Significance of Bacteria Associated with Diseased Cephalopods Maintained in Closed System Culture. LARISA A. FORD** and STEVE K. ALEXANDER. Department of Marine Biology, Texas A&M University at Galveston, Galveston, Texas.

- 9:15 Estimates of Bacterioplankton Secondary Production in a Southwestern Reservoir. THOMAS H. CHRZANOWSKI. Department of Biology, The University of Texas at Arlington, Arlington, Texas.
- 9:30 Comatabolism of Fulvic Acid (FA) by Aquatic Bacteria. SALEH H. BAIU** and K. R. JOHANSSON. Department of Biological Sciences, North Texas State University, Denton, Texas.
- 9:45 Soil Constituents used by Azotobacter Vinelandii. YICK LEE** and ROLAND VELA. North Texas State University, Denton, Texas.
- 10:00 COFFEE BREAK

*Denotes Person Presenting Paper

**Denotes Student Presentation

FRIDAY MORNING

September 21, 1984

Ballroom Salon B

MEDICAL MICROBIOLOGY SESSION I

Convener: Clifford Houston, Ph.D.

- 8:30 Cloning and Characterization of a Virulence-Associated Extrachromosomal Fragment of Shigella flexneri. CHARLES E. CHAMBERS**, S. S. JACKSON, M. L. SULLIVAN, D. W. NIESEL. Department of Microbiology, University of Texas Medical Branch, Galveston, Texas.
- 8:45 Antibody Production using the Outer Membrane Proteins of Legionella pneumophila, Strain 7. E. N. AHANOTU*, K. R. JOHANSSON and A. GOVERN. Department of Biology, North Texas State University, Denton, Texas.
- 9:00 Effect of Duration of Nutritional Insult on T Lymphocyte Functions in BCG-Vaccinated Guinea Pigs. C. L. MINTZER*, M. A. CARLOMAGNO and D. N. MCMURRAY. Department of Medical Microbiology and Immunology, College of Medicine, Texas A&M University, College Station, TX.
- 9:15 Alteration in Lung Defense Functions in Protein-malnourished Guinea Pigs Infected with Virulent Mycobacterium tuberculosis by the Respiratory Route. M. SCOTT KIMBALL*, C. L. MINTZER and D. N. MCMURRAY. Department of Medical Microbiology and Immunology, College of Medicine, Texas A&M University, College Station, TX.

- 9:30 Altered Parameters of Cell-mediated Immunity in Protein-malnourished, Babesia microti-infected mice. CHRISTINE T. MCFARLAND*, DAVID N. MCMURRAY and MIRTA A. CARLOMAGNO. Department of Medical Microbiology and Immunology, College of Medicine, Texas A&M University, College Station, Texas.
- 9:45 Elevated levels of Exopolysaccharides Associated with Mucoid Strains of Pseudomonas aeruginosa. DEBRA P. KRIEG**, TERENCE I. DORAN, JOSEPH A. BASS and STEPHEN J. MATTINGLY. University of Texas Health Science Center, San Antonio, Texas.
- 10:00 COFFEE BREAK
- 10:30 Multiplication in Human Blood by Human and Animal Isolates of Group G Streptococci. J. C. REITMEYER¹ and RUFUS K. GUTHRIE². University of Texas Medical Branch¹, Galveston, Texas and UTHSC, School of Public Health, Houston, Texas².
- 10:45 Interference of Bacterial Adherence to Human Epithelial Cells by Secretory IgA Released from Human Milk Leukocytes during Phagocytosis. E. A. WEAVER*, C. P. DAVIS, R. C. FADER, R. M. GOLDBLUM and A. S. GOLDMAN. Departments of Microbiology, Pediatrics and Human Biological Chemistry and Genetics, University of Texas Medical Branch, Galveston, Texas.

- 11:00 Development of a Burned Mouse Model to Examine the Pathogenesis of Candidiasis Following Thermal Injury. ROBERT C. FADER*, DIANA NUNEZ and DAVID N. HERNDON. Department of Microbiology, University of Texas Medical Branch and the Shriners Burns Institute, Galveston, Texas.
- 11:15 Chemical Parameters, Antimicrobial Activity, and Tissue Toxicity of a 0.1% Sodium Hypochlorite Solution. JULIE L. COTTER**, ROBERT C. FADER, and DAVID N. HERNDON. Department of Microbiology, University of Texas Medical Branch and the Shriners Burns Institute, Galveston, Texas.

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**Denotes Student Presentation

FRIDAY MORNING

September 21, 1984

Ballroom Salon D
(Access through Exhibits)

POSTER SESSION I - 10:00 - 12:00 Noon

- 1 Physarum Monoclonal Antibodies for use as Developmental Probes. M. E. SCHELLING and G. L. SHIPLEY. Departments of Physiology and Biology, Texas A&M University.
- 2 Transduction in Thermoactinomyces vulgaris. J. A. BOWSHER*, J. K. CARNES*, and W. C. MCDONALD. Department of Biology, University of Texas at Arlington, Arlington, Texas.
- 3 Cotton Swab Technique for Culturing Dermatophytes in Skin. ELIZABETH S. HEAD*, ETTA MACDONALD, JOHN C. HENRY and J. F. MULLINS. Departments of Dermatology and Microbiology, University of Texas Medical Branch, Galveston, Texas.
- 4 Serum Opacity Reaction and Nicotinamide Adenine Dinucleotide Glycohydrolase Production in Groups B, C, F, and G Streptococci. J. C. REITMEYER*, and RUFUS K. GUTHRIE[†]. University of Texas Medical Branch, Galveston, Texas and UTHSC[†], School of Public Health, Houston, Texas.
- 5 Survey of Superoxide Dismutases Found in Aerobic, Free-living, Nitrogen-fixing Bacteria of the Family Azotobacteraceae. EDWARD R. B. MOORE**, E. PININA NORROD and PETER JURTSUK, JR. Departments of Biology, University of Houston, Houston, Texas and Vassar College, Poughkeepsie, NY.

- 6 Identification of Oxidase Positive Bacillus species. JONG-KANG LIU** and PETER JURTSUK, JR. Department of Biology, University of Houston, Houston, Texas.

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FRIDAY AFTERNOON

September 21, 1984

Ballroom Salon B

MEDICAL MICROBIOLOGY SESSION 2

Convener: Robert C. Fader, Ph.D.

- 1:00 Mast Cell Degranulation by Mojave Toxin - A Model for Mast Cell Degranulation. JOSE E. GALINDO and EPPIE REAL*. Department of Biological Sciences, University of Texas at El Paso, El Paso, Texas.
- 1:15 Characterization of a Cytotoxic Factor Produced by Aeromonas hydrophila. JOANNE ROSE**, GERMAINE FLORENT, CLIFFORD W. HOUSTON, J. D. DIXON, and ALEXANDER KUROSKY. Departments of Microbiology and Human Biological Chemistry and Genetics, University of Texas Medical Branch, Galveston, Texas.
- 1:30 Experimental Staphylococcus aureus Burn Wound Infection: Possible Role of a Cytotoxin. F. C. W. KOO*, R. C. FADER and M. D. STEIN. Departments of Microbiology and Surgery, University of Texas Medical Branch and Shriners Burns Institute, Galveston, Texas.
- 1:45 Detection of an Extracellular Toxin Produced by Burn Isolates of Klebsiella pneumoniae. F. C. W. KOO* and M. D. STEIN. Departments of Microbiology and Surgery, University of Texas Medical Branch, Galveston and Shriners Burns Institute, Galveston, Texas.

2:00 COFFEE BREAK

2:30 Seroepidemiology of Cholera on Gulf Coastal Texas. MADELYN HUNT* and RUFUS GUTHRIE, University of Texas School of Public Health, Houston, Texas.

2:45 Stress Induced Sensitization to Glucocorticoid Antagonizing Factor (GAF): A Salient Response in Mice to Either Toxic Endotoxin or Radiation Detoxified Endotoxin. WILLIAM B. HUFF** and L. JOE BERRY. Department of Microbiology, The University of Texas at Austin, Austin, Texas.

3:00 The Influence of Iron on Morphology, Outer Membrane Structure, and Virulence of Campylobacter jejuni. LEANNE H. FIELD**, VIRGINIA H. WATSON, SHELLEY M. PAYNE, and L. JOE BERRY. Department of Microbiology, The University of Texas at Austin, Austin, Texas.

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**Denotes Student Presentation

FRIDAY AFTERNOON

September 21, 1984

Windward Room

GENERAL MICROBIOLOGY SESSION 2

Convener: Roland Vela, Ph.D.

- 1:00 The Expression of Oncogenes in Reticuloendotheliosis Transformed Cell Lines. NORBERT K. HERZOG**, WILLIAM J. BARGMANN, BARBARA E. MOORE, NANCY R. RICE⁺, and HENRY R. BOSE, JR. Department of Microbiology, University of Texas, Austin, Texas and Biological Carcinogenesis Program, Frederick Cancer Research Center, Frederick, MD.
- 1:15 Electrophoretic Analysis of Murine Rotavirus (EDIM). HOWARD LAROCHE, JR.** and A. JOANNE BEDNARZ-PRASHAD. The University of Texas Medical School at Houston, Houston, TX.
- 1:30 DNA Binding Properties of SV40 T Antigen-p53 Protein Complexes. VAN G. WILSON*. Department of Medical Microbiology and Immunology, Texas A&M University, College Station, Texas.
- 1:45 L-cells Degrade Interferon- β but not Interferon- α . V. RAMAMURTHY** and W. R. FLEISCHMANN, JR. Department of Microbiology, University of Texas Medical Branch, Galveston, Texas.

2:00 Studies on the Diphtheria Toxin Receptor.
 KYLE W. HRANITZKY** and LEON EIDELS.
 Department of Microbiology, University of
 Texas Health Science at Dallas, Dallas, TX.

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NOTES

FRIDAY AFTERNOON

September 21, 1984

Ballroom Salon A

CLINICAL MICROBIOLOGY

Convener: Millicent Goldschmidt, Ph.D.

- 1:00 A Specific Glucose Oxidase Immunoenzyme Stain for Mycobacterium leprae. EARL G. LONG, JOHN S. SMITH*, ELIZABETH C. HEAD, PATRICK J. BRENNAN¹, and JEROME H. SMITH. University of Texas Medical Branch, Galveston, Texas and Colorado State University¹, Fort Collins, CO.
- 1:15 A Rapid Method for Identification of Enterotoxigenic Escherichia coli. JOHNNY W. PETERSON*. University of Texas Medical Branch, Galveston, Texas.
- 1:30 Detection of Chlamydial Antibody Activity in Psittacine Bird Sera by Latex Agglutination. JAMES E. GRIMES. Department of Veterinary Microbiology and Parasitology, Texas A&M University, College Station, Texas.
- 1:45 Clinical and Laboratory Correlations for Coagulase-Negative Staphylococci (CNS) from Blood Cultures (BC). J. RAMOS-JIMENEZ, S. B. GREEMBERG and T. R. CATE. Baylor College of Medicine, Houston, Texas.
- 2:00 COFFEE BREAK

- 2:30 The Effect of Ascorbic Acid and Zinc Sulfate on Oral Health and Actinomycetes in Marmosets. MILLICENT C. GOLDSCHMIDT, JUANITA P. BRAY* and MERRILL WHEATCROFT. The University of Texas Health Science Center at Houston, Dental Branch, Dental Science Institute, Houston, Texas.
- 2:45 ~~Long~~ ^{Lyme} Disease - An Emerging Public Health Problem in Texas. JULIE RAWLINGS. Medical Serology Branch, Texas Department of Health, Austin, Texas.
- 3:00 Cryptosporidiosis: A Review and Report of a Human Case. DALE DINGLEY. Parasitology/-Entomology Branch, Texas Department of Health, Austin, Texas.
- 3:15 A Micro-clot Lysis Technique for Assaying Plasminogen Activator. M. L. LEWIS*, D. S. NACHTWEY² and K. L. DAMRON¹. Technology₂ Incorporated¹ and NASA, JSC, Houston, TX

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**Denotes Student Presentation

FRIDAY AFTERNOON

September 21, 1984

Ballroom Salon D
(Access through Exhibits)

POSTER SESSION 2 - 2:00 - 4:00 p.m.

- 7 Permeability of Latex and Polyvinyl Chloride Gloves to a Spectrum of Cytotoxic Drugs. JANA L. LAIDLAW*¹, THOMAS H. CONNOR¹, JEFFREY C. THEISS¹, ROGER W. ANDERSON² and THOMAS S. MATNEY². School of Public Health¹, UTHS, Department of Medical Genetics, Graduate School of Biomedical Sciences³, Houston, Texas and Department of Pharmacy Services - M. D. Anderson Hospital and Tumor Institute²,
- 8 Genotoxic Classification of Anti-cancer Drugs. THOMAS S. MATNEY*, TOT V. NGUYEN, THOMAS H. CONNOR, WILLIAM J. DANA and JEFFREY C. THEISS. University of Texas Health Sciences Center, Graduate School of Biomedical Sciences and School of Public Health, Houston, Texas.
- 9 Comparative Evaluation of Moxalactam and Tobramycin in the Treatment of Experimental Proteus mirabilis Osteomyelitis. J. T. MADER*, L. T. MORRISON, G. CIERNY. University of Texas Medical Branch, Galveston, Texas.
- 10 Detection of Bacillus cereus Diarrheal Toxin Using High Performance Liquid Chromatography. SYLVIA Y. YETTS, LARRY R. FIELD, REGINALD W. BENNETT. Food & Drug Administration, Dallas TX; Southern Methodist University, Dallas, TX; Food & Drug Administration, Washington, D.C.

- 11 Histopathology of a Non-polar Toxin of Aspergillus fumigatus in Mice. CHERYL BURNEY*, A. OGUNLEDUM, S. FADULU and H. WATKINS. Texas Southern University, Houston, Texas.
- 12 Preneoplastic and Neoplastic Bladder Changes with Chronic Urinary Tract Infection in Rats. C. P. DAVIS, M. S. COHEN, M. D. ANDERSON, M. B. GRUBER and M. M. WARREN. Departments of Microbiology and Surgery, UTMB, Galveston, Texas.

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**Denotes Student Presentation

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FRIDAY AFTERNOON

September 21, 1984

4:30 p.m.

Ballroom Salons A & B

Introduction: L. Joe Berry, Ph.D.

I. M. LEWIS LECTURE

"Cloning of Determinants of Pathogenicity
in Group A Streptococci"

by

Joseph J. Ferretti, Ph.D.

Chairman and Professor

Department of Microbiology and Immunology
University of Oklahoma Health Science Center
Oklahoma City, Oklahoma

6:30 - 7:30 p.m.

Social Hour

SATURDAY MORNING

September 22, 1984

Ballroom Salon B

MEDICAL MICROBIOLOGY SESSION 3

Convener: A. J. Bednarz-Prashad, Ph.D.

- 9:00 The Inability of Simian Virus 40 Recombinant DNAs to Induce Tumors Following Promotion with 12-Tetradecanoyl-Phorbol-13-Acetate (TPA). ADRIANA CORREA**¹, BRADLEY D. HOWARD¹, FLORENCE WALL¹, JAMES M. RICHARDSON¹, MARY PAT MOYER², and REX C. MOYER¹. Thorman Cancer Laboratory¹, Trinity University, and Department of Surgery², University of Texas Health Science Center, San Antonio, Texas.
- 9:15 Herpes Simplex Virus Infection is Diminished by B-Lymphocyte Depletion. C. A. JORDAN**, S. BARON and G. J. STANTON. Department of Microbiology, UTMB, Galveston, Texas.
- 9:30 Development of Acute Hemorrhagic Conjunctivitis (AHC) due to EV70 in an Animal Model. H. K. HEARD**, M. P. LANGFORD and G. J. STANTON. Department of Microbiology, UTMB, Galveston, Texas.
- 9:45 A Possible Precursor to and Antiviral Activity of a Cytotoxic Peptide of Pituitary Gland, Brain, and Splenic Origin. L. R. SMITH**, L. D. DION and J. E. BLALOCK. Department of Microbiology, UTMB, Galveston, Texas.
- 10:00 COFFEE BREAK

- 10:30 Bacterial Lipopolysaccharide Induction of Lymphocyte Derived Pro-opiomelanocortin Related Peptides. DEBORAH MCMENAMIN**, ERIC M. SMITH and J. EDWIN BLALOCK. Department of Microbiology, UTMB, Galveston, Texas.
- 10:45 Metastases to Lymphoid Organs Correlate with Inhibition of Local NK Activity. MARCELLA SARZOTTI*, GARY KLIMPEL and SAMUEL BARON. Department of Microbiology, UTMB, Galveston, Texas.
- 11:00 Activity of Human Natural Killer Cells and the Estrogen Cycle. ELIZABETH HARRIS, CAROL A. LEE* and JERRY T. HOLUBEC. Texas College of Osteopathic Medicine, Fort Worth, Texas.
- 11:15 Impairment of BCG Vaccine Efficacy by Dietary Protein Deficiency. D. N. MCMURRAY*, CAROLE L. MINTZER, MIRTA A. CARLOMAGNO and CHRISTINE T. MCFARLAND. Department of Medical Microbiology and Immunology, College of Medicine, Texas A&M University, College Station, Texas.
- 11:30 Mechanism of induction of gamma-interferon: Study on the role of macrophages. GUIDO ANTONELLI¹*, J. EDWIN BLALOCK² and FERDINANDO DIANZANI¹. ¹Institute of Virology, University of Rome, Italy and ²Department of Microbiology, University of Texas Medical Branch, Galveston, Texas.

*Denotes Person Presenting Paper

**Denotes Student Presentation

SATURDAY MORNING

September 22, 1984

Ballroom Salon A

CLINICAL SYMPOSIUM

"Rapid Methods of Laboratory Diagnosis"

Convener: George Buck, Ph.D.

Department of Pathology
University of Texas Medical Branch

1. David Maserang, Ph.D.
Abbot Laboratories
Chicago, Illinois
2. Helen Lucia, M.D.
Acting Director of Medical
Microbiology
University of Texas Medical Branch
Hospitals
Galveston, Texas
3. Charles Stager, Ph.D.
Department of Pathology
Baylor College of Medicine
Houston, Texas
4. Millicent E. Goldschmidt, Ph.D.
Dental Science Institute
Dental Branch
University of Texas Health Science
Center
Houston, Texas

SATURDAY MORNING

Saturday 22, 1984

Ballroom Salon A

BUSINESS MEETING AND AWARDS CEREMONY

11:30 a.m.

International Biotechnologies, Inc.
Sponsored

DNA SEQUENCING WORKSHOP

Coordinator: David Niesel, Ph.D.

(Location to be Announced - Inquire at
registration desk on Thursday or Friday.)

F. C. W. Koo
Department of Microbiology
The University of Texas Medical Branch
Galveston, Texas 77550



Texas Branch, ASM
Fall Meeting 1984
The San Luis Hotel
5222 Seawall Boulevard
Galveston, Texas 77550

REGISTRATION:
20 SEPT 4 p.m. - 7 p.m.
21 SEPT 8 a.m. - 4 p.m.
22 SEPT 8 a.m. - 10 a.m.

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