



TEXAS BRANCH
AMERICAN SOCIETY
FOR
MICROBIOLOGY

FALL
MEETING
1983

SEPTEMBER 29 - OCTOBER 1
AGGIELAND HOTEL
COLLEGE STATION, TEXAS

BRANCH OFFICERS

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CONVENTION COMMITTEE

David N. McMurray, Department of Medical Microbiology, and Immunology, College of Medicine, Texas A&M University

Gale Wagner, Department of Veterinary Microbiology and Parasitology, College of Veterinary Medicine, Texas A&M University.

Donald R. Lueking, Department of Biology, College of Science, Texas A&M University

ACKNOWLEDGMENTS

We would like to express our appreciation to Dr. John P. Fackler, Dean, College of Science; Dr. Robert S. Stone, Dean, College of Medicine; Dr. George C. Shelton, Dean, College of Veterinary Medicine; and Dr. H. O. Kunkle, Dean, College of Agriculture for providing funds to help defray incurred expenses.

SUSTAINING MEMBERS

- | | |
|------------------------------|------------------------------------|
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All conference attendees and their guests are urged to support the sustaining members by visiting their exhibits in Room C.

PROGRAM SUMMARY

Thursday, Sept. 29

- 3:00-6:00 Executive Committee Meeting, Texas Branch ASM Officers and
Guests, Room 403 TAMU Medical Sciences Building.
- 7:30-10:00 Symposium Room A

Friday, Sept. 30

- 8:30-11:15 General Microbiology, Room A
- 8:00-11:15 Medical Microbiology, Room B
- 1:30-3:45 General Microbiology, Room A
- 1:00-3:45 Medical Microbiology, Room B
- 4:15 I. M. Lewis Lecture, Room A
- 5:15-6:15 Mixer, Aggieland Hotel Penthouse Club
- 6:30-8:30 BBQ Dinner, Bee Creek Park

Saturday, Oct. 1

- 8:30-10:45 General Microbiology, Room A
- 8:30-10:45 Medical Microbiology, Room B
- 8:30-11:15 Clinical Symposium, Aggieland Hotel
- 11:30 Business Meeting, Room A

**THURSDAY
29 SEPT 83**

3:00-7:00 PM Registration in Aggieland Hotel Lobby

3:00-6:00 PM Executive Committee Meeting, Texas Branch ASM Officers
and Guests, Room 403 TAMU Medical Sciences Building.

**THURSDAY EVENING SYMPOSIUM
7:30-10:00
Room A**

**"THE MOLECULAR AND CELLULAR
ASPECTS OF IMMUNOREGULATION"**

Dr. Ian Tizard, College of Veterinary Medicine, Texas A&M University,
College Station, Tx.

**Modern Concepts of the Immune Response and Immunoregulatory
Mechanisms**

Dr. J. Michael Kehoe, College of Medicine, Northeastern Ohio University,
Rootstown, Ohio.

Genetic Control of Antibody Formation

Dr. Marguerite M. B. Kay, Olin E. Teague Veterans Center, Temple, Tx.

Altered Immunoregulation in Aging

FRIDAY MORNING
30 SEPT 83
ROOM A

GENERAL MICROBIOLOGY

Convener: Dr. James R. Johnson, Texas A&M University

- 8:30 Studies on a glycoprotein-pigment complex from membranes of *Corynebacterium poinsettiae*. B. WARISO* and A. S. KESTER; Dept. of Biol. Sci., North Texas State Univ., Denton, TX.
- 8:45 Partial characterization of pigment-protein complexes from membranes of *Xanthomonas campestris* (juglandis). L. ARIRIATU* and A. S. KESTER; Dept. Biol. Sci., North Texas State Univ., Denton, TX.
- 9:00 Complementation of two multicellular genes from *Wangiella dermatitidis* by spheroplast fusion. R. C. SCHAFFER*, C. R. COOPER, JR., and P. J. SZANISZLO; Ctr. for Applied Microbiol. and Dept. of Microbiol., Univ. of Texas at Austin.
- 9:15 Sarcoplasmic reticulum: Immunological and biological studies. P. H. DEFOOR*, Y. F. CHANG and H. W. RENSHAW; Dept. of Microbiol. and Parasitol., Texas A&M University.
- 9:30 COFFEE BREAK—Room C
- 10:00 Effects of crude *Corynebacterium pseudotuberculosis* toxin extract on caprine polymorphonuclear leukocytes. J. L. AUGUSTINE*, Y. F. CHANG and H. W. RENSHAW; Dept. of Vet. Microbiol. and Parasitol., Texas A&M University.
- 10:15 Pneumonic pasteurellosis: chemiluminescent responses of bovine leukocytes to live and heat-killed *Pasteurella haemolytica* and other bacteria. Y. F. CHANG* and H. W. RENSHAW; Dept. of Vet. Microbiol. and Parasitol., Texas A&M University.
- 10:30 Alternate and classical complement pathway activities in paired maternal-dairy goat-newborn kid serums. A. B. RICHARDS*, H. W. RENSHAW, E. J. BROWDER, and R. J. MARTENS; Dept. Vet. Microbiol. and Parasitol., Texas A&M University.
- 10:45 Characteristics of the phagocytically induced metabolic burst in leukocytes from dogs with pelger-huet anomaly. E. J. BROWDER* and H. W. RENSHAW; Dept. Vet. Microbiol. and Parasitol., Texas A&M University.
- 11:00 Multiallelic variation of the quarterhorse ELA. R. FISTER*, J. CALDWELL and H. RENSHAW; Dept. Vet. Microbiol., Parasitol. and Dept. Anim. Sci., Texas A&M University.
- 11:15 LUNCH

FRIDAY MORNING
30 SEPT 83
ROOM B

MEDICAL MICROBIOLOGY

Convener: Dr. John M. Quarles, Texas A&M University

- 8:00 Tumorigenesis of defined fragments of simian virus 40 DNA. R. C. MOYER¹, M. P. MOYER², H. ARIZPE³, A. SOSA⁴, and K. PIERSON⁵. Dept. Biol., Trinity Univ., San Antonio, Tx.¹, Dept. Surgery, Univ. Texas Health Sci. Ctr., San Antonio, Tx.², Dept. Microbiol., Univ. Texas Health Sci. Ctr., San Antonio, Tx.³, Baylor Coll. Med., Houston, Tx.⁴, and Med. Coll., Univ. Paris, France⁵.
- 8:15 Preparation of recombinant molecules and encoding serum resistance from a disseminating strain of *Neisseria gonorrhoeae*. W. M. McSHAN*, R. A. HULL, and R. P. WILLIAMS; Baylor Coll. Med., Houston, TX.
- 8:30 Effect of thermal injury on the survival of mice bearing ehrlich ascites tumors. R. R. BRUTKIEWICZ*, F. SUZUKI and R. B. POLLARD; Div. of Infectious Diseases, Dept. Intern. Med., Univ. Texas Med. Branch and Virol. Div., Shriners Burns Inst.
- 8:45 Concentration of Rota and Enteroviruses from Blue Crabs (*Callinectes sapidus*). K. N. SEIDEL, S. M. GOYAL, V. C. RAO* and J. L. MELNICK; Dept. Virol. and Epidemiol., Baylor Coll. Med., Houston, TX.
- 9:00 Evaluation of methods for recovery of enteroviruses from estuarine sediments. V. C. RAO* and J. L. MELNICK; Dept. Virol. and Epidemiol., Baylor Coll. Med., Houston, TX.
- 9:15 COFFEE BREAK—Room C
- 10:00 Humoral and cell-mediated immune response of goats to *Corynebacterium pseudotuberculosis* antigens. T-Y HSU*¹, C. W. LIVINGSTON^{1,2}, and H. W. RENSHAW¹; Dept. Vet. Microbiol. and Parasitol.¹, San Angelo Res. and Extn. Ctr.², Texas A&M University.
- 10:15 Neutralizing effect of sera on a unique anti-microbicidal mechanism of *Pasteurella haemolytica*. A. B. RICHARDS*, YUNG-FU CHANG, H. W. RENSHAW; Dept. Vet. Microbiol. and Parasitol., Texas A&M University.
- 10:30 Passive hemagglutination test for determining the immune responses of rabbits and horses to *Rhodococcus (Corynebacterium) equi* of equine abscess origin. M. MOORE¹, H. W. RENSHAW¹, and R. J. MARTENS²; Dept. Vet. Microbiol. and Parasitol.¹, Dept. of Lg. Anim. Med., Texas A&M University.
- 10:45 Inhibition of delayed-type hypersensitivity in BALB/c mice with macrophage-pulsed listerial antigens. M. A. HULSEY*, and B. G. FOSTER; Dept. Biol., Texas A&M University.
- 11:00 A set of two monoclonal antibodies directed against the 39K outer membrane protein of *Haemophilus influenzae* type b defines all strains of this pathogen. P. A. GULIG* and E. J. HANSEN. Univ. of Texas Health Sci. Ctr., Dallas, TX.
- 11:15 LUNCH

FRIDAY AFTERNOON
30 SEPT 83
ROOM A

GENERAL MICROBIOLOGY

Convener: Dr. Billy G. Foster, Texas A&M University

- 1:30 Preliminary characterization of a bacteriophage of *Thermoactinomyces vulgaris*. A. BOWSER* and W. C. McDONALD; Dept. Biol., The Univ. Tex. at Arlington, Arlington, TX.
- 1:45 The Excision of molecularly cloned Kirsten murine leukemia virus DNA. J. E. KNESEK; Dept. Tumor Biol., Virol., Sect., The Univ. Tex. Sys. Cancer Ctr., M. D. Anderson Hosp. and Tumor Inst., Texas Med. Ctr., Houston, TX.
- 2:00 Characterization of the *metF* transcription unit of *Escherichia coli*. M. R. EMMETT and J. R. JOHNSON; Dept. Biol., Texas A&M University.
- 2:15 Deletion analysis of the *metJ* and *metBL* transcription units of *Escherichia coli*. T. LEWIS*, O. K. FEARING⁰ and J. R. JOHNSON; Dept. Biol., Texas A&M Univ., ⁰Univ. Texas Health Sci. Ctr., San Antonio, TX.
- 2:30 COFFEE BREAK—Room C
- 3:00 Regulatory aspects of interferon induced antiviral state: a contrasting kinetics in response to the two different types of interferons. V. RAMAMURTHY* and W. R. FLEISCHMANN, JR.; Dept. Microbiol., Univ. Texas Med. Branch, Galveston, TX.
- 3:15 Antibody response to T-dependent and T-independent antigens in young adult and aged chickens. D. H. WARNER*, H. W. RENSHAW and R. C. FANGUY; Dept. Vet. Microbiol., Parasitol., and Dept. of Poultry Sci., Texas A&M University.
- 3:30 Introductory studies to caprian lymphocyte antigens. R. FISTER*, H. RENSHAW and J. AUGUSTINE; Dept. Vet. Microbiol. and Parasitol., College of Vet. Med., Texas A&M University.
- 3:45 SESSION ENDS
- 4:15 I. M. LEWIS LECTURE

FRIDAY AFTERNOON
30 SEPT 83
ROOM B

MEDICAL MICROBIOLOGY

Convener: Dr. Barbara Doughty, Texas A&M University

- 1:00 Interaction of *Pasteurella haemolytica* leukotoxin and bovine leukocytes: comparison of three methods for level of sensitivity. Y. F. CHANG* and H. W. RENSHAW. Dept. Vet. Microbiol. and Parasitol., Texas A&M University.
- 1:15 The role of cellular lipoteichoic acids as mediators of adherence of group B streptococci to human fetal and adult epithelial cells. T. J. NELSON* and STEPHEN J. MATTINGLY; Univ. Texas Health Sci. Ctr. at San Antonio, Dept. Microbiol., San Antonio, TX.
- 1:30 Canine granulocytopeny syndrome: characteristics for the phagocytically-induced metabolic burst in leukocytes from dogs with increased susceptibility to microbial infections. H. W. RENSHAW*, D. H. WARNER, J. L. AUGUSTINE, and R. FISTER; Dept. Vet. Microbiol. and Parasitol., Texas A&M University.
- 1:45 Anti-metabolic effects of pathogenic isolates of *Pasteurella haemolytica* on bovine phagocytic cells. A. B. RICHARDS* and H. W. RENSHAW; Dept. Vet. Microbiol. and Parasitol., Texas A&M Uni.
- 2:00 Relationship of enteropathogenic *Escherichia coli* somatic serogroup to HEp-2 cell adherence. J. J. MATHEWSON*, H. L. DUPONT, and S. A. THORNTON; The Univ. Tex. Med. Sch. at Hous., Houston, TX.
- 2:15 COFFEE BREAK—Room C
- 2:45 Serologic evaluation of foals experimentally and naturally infected with *Rhodococcus (Corynebacterium) equi*. M. MOORE*¹, H. W. RENSHAW¹ and R. J. MARTENS²; Dept. Vet. Microbiol. and Parasitol.¹, Dept. of Lg. Anim. Med. Surg.², Texas A&M University.
- 3:00 Prelim. analysis of lymphocyte populations by flow cytometry on a patient with Eaton-Lambert Syndrome. J. MEASEL and FRAN LAVENDER; Dept. Microbiol., Tex. Coll. Osteopathic Med., Ft. Worth, TX.
- 3:15 Possible correlations between the OLA and susceptibility to caseous lymphadenitis. J. L. AUGUSTINE*, R. FISTER, D. W. WARNER, J. CALDWELL and H. W. RENSHAW; Dept. Vet. Microbiol., Parasitol., and Dept. Anim. Sci., Texas A&M University.
- 3:30 Comp. of the inhibitory effects of free and liposomal encapsulated Amphotericin B on growth and respiration of *Candida albicans*. R. L. HOPFER*, K. MILLS, R. MEHTA, B. McDONALD, G. LOPEZ-BERESTEIN, and R. JULIANO; M. D. Anderson Hosp. and Tumor Inst. and Univ. of Tex. Med. Sch. at Hous., Houston, TX.
- 3:45 SESSION ENDS
- 4:15 I. M. LEWIS LECTURE

FRIDAY AFTERNOON
30 SEPT 83
ROOM A—4:15 PM

I. M. LEWIS LECTURE

**“Acquired Immune Deficiency Syndrome (AIDS):
Etiology and Consequences of Immunologic Abnormalities”**

Dr. Peter Mansell
Deputy Director, Cancer Detection Center
M. D. Anderson Hospital and
Tumor Institute
Texas Medical Center
Houston, Texas

There will be a mixer in the Aggieland Hotel Penthouse Club immediately following the I. M. Lewis lecture (5:15-6:15). Beer and snacks will be provided and a cash bar for mixed drinks will be available.

Following the mixer (6:30-8:30), there will be a catered BBQ dinner at Bee Creek Park. Tickets for the dinner are \$5.00. Transportation to Bee Creek Park will be available at the Hotel Lobby entrance.

SATURDAY MORNING

1 OCT 83

ROOM A

Room 120
1st floor
North wing

GENERAL MICROBIOLOGY

Convener: Dr. Margaret Schelling, Texas A&M University

- 8:30 Microbial degradation of artificial tar balls. M. SAVAGE* and C. H. WARD; Dept. Environ. Sci. & Eng., Rice Univ., Houston, TX.
- 8:45 Some questions concerning the fluorescein diacetate method of detecting metabolizing bacteria. T. H. CHRZANOWSKI*, R. D. CROTTY, J. G. HUBBARD and R. P. WELCH; Dept. Biol., The Univ. Texas at Arlington, Arlington, TX.
- 9:00 Lymph thrombi in animals infected with a filarial nematode, *Brugia malayi*. A. EWERT; Dept. Microbiol., Univ. Tex. Med. Branch, Galveston, TX.
- 9:15 Detection of enterotoxigenic *Escherichia coli* in foods using the enzyme-linked immunosorbent assay. L. V. WOOD and J. L. MEMPHILL*; Univ. Tex. Med. Sch., Houston, Tx.
- 9:30 COFFEE BREAK
- 10:00 Superoxide anion production by polymorphonuclear leukocytes from young and aged beagle dogs. T. HANSON*, J. L. AUGUSTINE, D. H. WARNER, and H. W. RENSHAW; Dept. Vet. Microbiol. and Parasitol., Texas A&M University.
- 10:15 Biological, immunological and chemical studies of *Corynebacterium pseudotuberculosis* exotoxin. T-Y HSU*¹, C. W. LIVINGSTON, JR.^{1,2}, PAUL DEFOOR¹, and H. W. RENSHAW; Dept. Vet. Microbiol. and Parasitol.¹, San Angelo Research and Extension Ctr.², Texas A&M University.
- 10:30 Extrachromosomal genetic elements identified in clinical isolates of *Pasteurella haemolytica*. A. B. RICHARDS*¹, L. W. SNEED², and H. W. RENSHAW¹; Dept. Vet. Microbiol. and Parasitol.¹, Tex. Vet. Med. Diag. Lab.^{1,2}, Texas A&M University.
- 10:45 SESSION ENDS
- 11:30 BUSINESS MEETING

SATURDAY MORNING

1 OCT 83

ROOM B

MEDICAL MICROBIOLOGY

Convener: Dr. Karin Ippen-Ihler, Texas A&M University

- 8:30 Antibody-dependent cellular cytotoxicity (ADCC) of human and guinea pig leukocytes against virulent *Shigella sonnei*. DONNA MORGAN*, S. KOHL and H. DUPONT; Univ. Tex. Med. Sch. at Houston, Houston, TX.
- 8:45 Purification and characterization of a cholera-toxin crossreactive factor produced by *Aeromonas hydrophila*. J. D. CAMPBELL, C. W. HOUSTON*, C. GENEUX, and A. KUROSKY; Dept. Microbiol., Univ. Tex. Med. Branch, Galveston, TX.
- 9:00 Antisecretory activity of coperamide and ibuprofen against *Escherichia coli* enterotoxins *in vivo* and *in vitro*. L. V. WOOD*, D. R. MORGAN and H. L. DUPONT; Univ. Tex. Med. Sch., Houston, TX.
- 9:15 Protein profiles of *Chlamydia psittaci* from diverse avian sources. D. K. WINSOR, JR.*, and J. E. GRIMES; Dept. Vet. Microbiol. and Parasitol., Texas A&M University.
- 9:30 COFFEE BREAK—Room C
- 10:00 Pneumonic pasteurellosis: species specificity of *Pasteurella haemolytica* leukotoxin. Y. F. CHANG*, P. H. DEFOOR and H. W. RENSHAW; Dept. Vet. Microbiol., and Parasitol., Texas A&M University.
- 10:15 Evaluation of the MS-2 and lumac systems for the rapid screening of urine specimens. W. D. WELCH, M. A. LAYMAN*, and P. M. SOUTHERN, JR.; Dept. Pathol., Univ. Texas Health Sci. Ctr., Dallas and Texas Woman's University.
- 10:30 Campylobacter-like-organisms from blood cultures of cancer patients. K. MILLS*, J. PASTERNAK, R. BOLIVAR, R. L. HOPFER, V. FAINSTEIN, A. RIOS, and W. STAMM; M. D. Anderson Hosp. and Tumor Inst. at Houston, Texas and The Harborview Med. Ctr. at Seattle, Wa.
- 10:45 SESSION ENDS
- 11:30 BUSINESS MEETING

CLINICAL SYMPOSIUM
SATURDAY MORNING
1 OCT 83
AGGIELAND HOTEL

in
Room A
8:30

**ACQUIRED IMMUNE DEFICIENCY SYNDROME AND
ASSOCIATED OPPORTUNISTIC INFECTIONS**

Convener: Tom Huber, Departments of Medical Microbiology and
Immunology and Pathology and Laboratory Medicine
Texas A&M University, College of Medicine
Olin E. Teague Veterans Center, Temple, Texas

- 8:30 **Clinical aspects of AIDS and opportunistic infections**
Peter Mansell, Director, Cancer Detection Center, M. D. Anderson
Hospital and Tumor Institute, Houston, Texas
- 9:30 **The biology and diagnosis of cryptosporidiosis**
Beth Mamer, Department of Veterinary Microbiology and Parasitology,
Texas A&M University, College Station, Texas
- 10:00 Break and Poster Review
- 10:30 **The diagnosis of opportunistic fungal and mycobacterial infections**
Roy Hopfer, Department of Laboratory Medicine, M. D. Anderson
Hospital and Tumor Institute, Houston, Texas
- 10:45 **The diagnosis of parasitic and bacterial infections**
Karen Mills, Department of Laboratory Medicine, M. D. Anderson
Hospital and Tumor Institute, Houston, Texas
- 11:00 **Importance of virus infections in AIDS patients**
Lynn Little, Bureau of Laboratories, Texas Department of Health,
Austin, Texas
- 11:15 SESSION ENDS
- 11:30 BUSINESS MEETING

Donald R. Lueking
Department of Biology
Texas A&M University
College Station, Texas 77843

TEXAS BRANCH, ASM
FALL MEETING
Agrieland Hotel
1502 S. Texas Ave.
College Station, Texas

REGISTRATION:

29 Sept	3-7 pm
30 Sept	8 am-4 pm
1 Oct	8-9 am