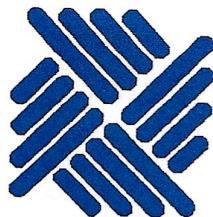


14th International Scientific Conference on Lyme Disease & other Tick-Borne Disorders

#21. Conf.



Jointly sponsored by:
The College of Physicians and
Surgeons of Columbia University
and the Lyme Disease Foundation



Diagnosis, Treatment & Research Update

April 21 - 23, 2001
Hartford Marriott, CT



This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the College of Physicians & Surgeons of Columbia University and the Lyme Disease Foundation.

The College of Physicians & Surgeons of Columbia University is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians.

The College of Physicians & Surgeons designates this educational activity for a maximum of **16 hours** in Category 1 credit towards the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.



LYME DISEASE FOUNDATION

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LYME DISEASE FOUNDATION

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April 17, 2001

Dear Friends:

Welcome to the Lyme Disease Foundation's (LDF) 14th International Conference on Lyme Disease and Other Tick-Borne Disorders! The conference is one of the primary programs of the LDF, and our board members, associates and supporters should all take great pride knowing that our group effort to raise awareness and encourage and disseminate balanced scientific study is paying off.

A study by LDF scientific advisor Brian Fallon, MD, Columbia University is just one of several encouraging Lyme disease studies currently being conducted. Dr. Fallon's study will provide important answers about the effects of long-term antibiotic therapy in patients with chronic Lyme disease. Other important research, much of which will be presented here, continue to encourage me that our mutual goal to facilitate timely diagnosis and assure proper medical care for patients of tick-borne disorders will soon be realized.

Science, however, is not science until it is presented through such mediums as this conference. Because of this, I thank each and every one of you for continuing to make balanced science a reality by making the LDF's annual conference a success.

Sincerely,

Thomas Forschner
Executive Director
Lyme Disease Foundation

PROGRAM COMMITTEE

James Miller, PhD *UCLA School of Medicine*
Sam Donta, MD *Boston University School of Medicine*
Brian Fallon, MD *Columbia University College of Physicians & Surgeons*
Ed Bosler, PhD *SUNY at Stony Brook School of Medicine*
Charles Pavia, PhD *New York Medical College*
Ronald Schell, PhD *University of Wisconsin School of Medicine*

FACULTY

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John Anderson, PhD *Connecticut Agricultural Experiment Station*
Edward M. Bosler, PhD *SUNY at Stony Brook School of Medicine*
Mary Beth Buchholz *The Sheridan Group*
JoAnne Burkholder, PhD *University of North Carolina*
PEW Fellow Professor of Aquatic Botany; Director, Center for Applied Aquatic Ecology, NC State University, 1998 Scientific Freedom & Responsibility Award - American Academy for the Advancement of Science; 1999 Huter Award - Society of Protozoologists; 2000 Leopold Leadership
Steve Callister, PhD *Gundersen Lutheran Medical Center*
Daniel Cameron, MD, MPH *Internist, Epidemiologist, New York*
Patricia Coyle, MD *SUNY at Stony Brook School of Medicine*
Sam Donta, MD *Boston University School of Medicine*
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Kornelia Keszler, MD *Yale University School of Medicine*
W. Ian Lipkin, MD *Louise Turner Arnold Chair of Neurosciences, Emerging Diseases Laboratory, University of California*
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Ronald Schell, PhD *University of Wisconsin School of Medicine*
Steve Schutzer, PhD *University of Medicine and Dentistry of New Jersey*
Leo Shea, PhD *New York University School of Medicine*
Jon Skare, PhD *Texas A & M University System Health Science Center*
Kirby Stafford, PhD *Connecticut Agricultural Experiment Station*

TARGET AUDIENCE

This conference is designed for clinical professionals (including but not limited to Physicians, Nurse Practitioners, Physician Assistants, Public Health Officers, Researchers and Veterinarians) and other health professionals (medical directors, risk managers) who wish to enhance their knowledge of Lyme disease and other tick-borne disorders.

CONFERENCE GOALS

- a. Recognize the complex nature of *Borrelia burgdorferi* in both in terms of its antigenic variability and the host response to infection;
- b. Understand the rationale for different treatment approaches to Lyme disease in animals and humans;
- c. Clarification of the role of diagnostic tests for Lyme disease;
- d. Understand the presentations of neurologic Lyme disease in children and adults, including the role of neuropsychological testing and neuroimaging;
- e. Understand the epidemiology, clinical phenomenology, and diagnostic methods for detecting other vector-borne diseases, such as babesiosis, ehrlichiosis, Rocky Mountain spotted fever, and West Nile virus;
- f. Understand relevant research regarding these diseases.

DISCLOSURE

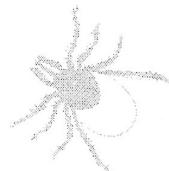
Before the program, all faculty will disclose the existence of any financial interest and/or other relationship(s) (e.g. employee, consultant, speaker's bureau, grant recipient, research support, stock ownership or any other special relationship) they might have with a.) the manufacturer(s) of any commercial product(s) to be discussed during their presentation and/or b.) any commercial contributor to this activity. When unlabeled uses are discussed, these will also be indicated by an asterisk (*). Note: only ceftin has an FDA indication for use in LD.

<u>Speaker</u>	<u>Disclosure</u>
Maria Aguero-Rosenfeld, MD	None
John Anderson, PhD	None
Edward M. Bosler, PhD	None
Mary Beth Buchholz	None
JoAnne Burkholder, PhD	None
Steve Callister, PhD	Employee of Gunderson Lutheran Medical Center (patent holder of Borreliacidal Antibody Test)
Daniel Cameron, MD, MPH*	None
Patricia Coyle, MD	None
Sam Donta, MD	None
Brian Fallon, MD, MPH*	Research support, Roche Pharmaceuticals, Home Care Services
Paul T. Fawcett, PhD	None
Lesley Fein, MD, MPH	None
Andrew Franks, Jr., MD	None
Martin Fried, MD	None
Tessa Gardner, MD	Speaker's Bureau, SmithKline Beecham
David G. Johnson	None
Kornelia Keszler, MD	None
W. Ian Lipkin, MD	None
Louis Magnarelli, PhD	None
Richard Marconi, PhD	None
Edwin Masters, MD	None
James Miller, PhD	None
Charles Pavia, PhD	None
Mario Philipp, PhD	None
Dorothy Pietrucha, MD	None
John Planz, PhD	None
Scott Samuels, PhD	None
Ronald Schell, PhD	None
Steve Schutzer, PhD	Interest in diagnostic-related patent
Leo Shea, PhD	None
Jon Skare, PhD	None
Kirby Stafford, PhD*	None

PROGRAM AGENDA

Sunday, April 22, 2001

Registration & CME Sign-in 7:00 - 9:00 Program 8am - 5:30pm



Welcome from the LDF: James Miller, PhD

KEYNOTE

Moderator - James Miller, PhD

8:00 **Keynote** The politics of discovering an emerging disease: The *Pfiesteria* experience.
JoAnn M. Burkholder, PhD *University of North Carolina* - PEW Fellow Professor of Aquatic Botany; Director, Center for Applied Aquatic Ecology, NC State University, 1998 Scientific Freedom & Responsibility Award - American Academy for the Advancement of Science; 1999 Huter Award - Society of Protozoologists; 2000 Leopold Leadership
8:30 Importance of working with Congress and the Administration on healthcare policy.
Mary Beth Buchholz *The Sheridan Group*
8:50 - 9:00 - Discussion

SPIROCHETAL RESEARCH

Moderators: James Miller, PhD; Ron Schell, PhD

9:00 Reactivation of Lyme Disease Following Lyme OspA Vaccine
Sam Donta, MD *Boston University School of Medicine*
9:25 Animal models in the study of human spirochetal infections.
James Miller, PhD *UCLA School of Medicine*
9:50 Mechanisms of persistency of the Lyme disease spirochete.
Charles Pavia, PhD *NY Medical College School of Medicine, NYCOM Microbiology and Immunodiagnostic Laboratory of NYIT*

10:10 Break

10:30 Comparative analysis of the immune evasion systems employed by the Lyme disease spirochetes.
Richard T. Marconi, PhD *Medical College of VA at VA Commonwealth University*
10:50 Regulation of outer surface protein gene expression.
Scott Samuels, PhD *University of Montana*
11:10 How *Borrelia burgdorferi* responds to oxidative stress.
Jon Skare, PhD *Texas A & M University System Health Science Center*
11:30 - Noon - Discussion

Noon - 1pm - Lunch

TESTING ISSUES

Moderators: Ron Schell, PhD; Jon Planz, PhD

1:00 Serology in early Lyme disease.
Maria E. Aguero-Rosenfeld, MD *Westchester Medical Center; NY Medical College*
1:25 Western blot testing for diagnosing Lyme borreliosis: Potentials, problems, performance.
Paul T. Fawcett, PhD *Alfred I. duPont Hospital for Children*
1:50 Clinical evaluation of the Borreliacidal antibody test.
Steve Callister, PhD *Gundersen Lutheran Medical Center*
2:15 Serodiagnosis of Lyme disease with the C6 peptide.
Mario T. Philipp, PhD *Tulane University Medical Center*
2:40 Immune complex serodiagnosis.
Steve Schutzer, MD *University of Medicine and Dentistry of New Jersey*

3:05 Break

3:25 Discussion

PREVENTION TECHNIQUES

Moderator: Ed Bosler, PhD

3:50 Host targeted acaricidal treatments on rodents to control densities of *Ixodes scapularis* subadult ticks.
Edward M. Bosler, PhD *SUNY at Stony Brook School of Medicine*
4:15 Community prevention programs: New technologies in tick control.
Kirby Stafford, PhD *Connecticut Agricultural Experiment Station*
4:40 Community Partnerships: Texas.
David G. Johnson
5:05 - 5:30 Discussion

Monday, April 23, 2001

Registration & CME Sign-in 7:00 - 9:00 Program 8am - 5:30pm

KEYNOTE

Moderators : Brian Fallon, MD,

8:00 **Keynote** Pathogen discovery: West Nile and beyond.

W. Ian Lipkin, MD *Louise Turner Arnold Chair of Neurosciences, Emerging Diseases Laboratory, University of California*

8:30 West Nile virus: A global hitchhiker.

John Anderson, PhD *Connecticut Agricultural Experiment Station*

8:55 Discussion

TICK-SPREAD DISEASES

Moderators : Brian Fallon, MD, James Miller, PhD, Sam Donta, MD

9:05 Ehrlichiosis in the Northeast.

Louis Magnarelli, PhD *Connecticut Agricultural Experiment Station*

9:30 Babesiosis, ehrlichiosis, Lyme(-like) disease variations.

Ed Masters, MD *Regional Primary Care Physicians*

9:55 Break

10:15 Bartonella in humans.

Lesley Fein, MD, MPH *Mountainside Hospital*

10:40 Discussion

10:55 Evidence for *Borrelia burgdorferi* as an etiologic agent in morphea

Andrew Franks, Jr., MD *New York University School of Medicine*

11:20 21st century Lyme disease.

Daniel Cameron, MD, MPH *Internist, Epidemiologist, New York*

11:45 Cardiac manifestations of Lyme disease.

Kornelia Keszler, MD *Yale University School of Medicine*

12:10 - Lunch

1:10 Neurologic Lyme disease.

Patricia Coyle, MD *SUNY at Stony Brook School of Medicine*

1:35 Differential diagnosis of Lyme encephalopathy.

Brian Fallon, MD, MPH *Columbia University College of Physicians & Surgeons*

2:00 Cognitive remediation.

Leo Shea, PhD *New York University School of Medicine*

2:25 Discussion

2:50 Break

3:10 Lyme disease in pregnancy.

Tessa Gardner, MD *Washington University School of Medicine*

3:35 Pediatric neurologic Lyme disease.

Dorothy Pietrucha, MD *Jersey Shore Medical Center, Meridan Health System*

4:00 Gastrointestinal manifestations of Lyme disease.

Martin Fried, MD *Jersey Shore Medical Center*

4:25 LD Retreatment Study: A double-blinded, placebo-controlled, randomized trial evaluating the efficacy and success of oral antibiotics for recurrent seropositive and seronegative Lyme disease in adults. Daniel Cameron, MD, MPH *Internist, Epidemiologist, New York*

4:50 - 5:30 Questions and Answers