EDITOR

Jagdev M. Sharma The Biodesign Institute Arizona State University Tempe, Arizona 85287-5401

BUSINESS MANAGER

Charles L. Hofacre University of Georgia 953 College Station Road Athens, Georgia 30602-4875

EDITORIAL BOARD

A. Banda

A. J. Bermudez

H. D. Chapman

R. P. Chin

S. Davison

J. M. Day

A. M. Fadly

S. D. Fitzgerald

O. J. Fletcher

R. K. Gast

I. Gimeno

P. Gibbs

J. S. Guy

F. J. Hoerr

D. J. Jackwood

M. W. Jackwood

T. Johnson

D. R. Kapczynski

S. H. Kleven

C. W. Lee

M. Lee

H. S. Lillehoj

B. Lupiani

L. R. McDougald

L. Nolan

A. Noomohammadi

M. Pantin-Jackwood

M. S. Parcells

S. Rautenschlein

S. Reddy

D. L. Reynolds

Y. M. Salf

K. A. Schat

H. Sellers

H. L. Shivaprasad

R. F. Silva

R. Singer

E. Spackman

D. L. Suarez

D. E. Swayne

H. Toro

V. van Santen

P. S. Wakenell

P. Wigley

P. R. Woolcock

C. C. Wu

Q. Zhang

Avian Diseases

An international journal dedicated to avian health

Published Quarterly by the American Association of Avian Pathologists





Vol. 54 No. 1

March 2010

Pages 1-172

Copyright 2010 by the American Association of Avian Pathologists, Inc.

Avian Diseases

Vol. 54, No. 1 March 2010

Table of Contents

Obituary—	
Charles E. Whiteman	1
Invited Review—	
Clinical Aspects of Immunosuppression in Poultry. Frederic J. Hoerr	2
Regular Articles—	
Astrovirus, Reovirus, and Rotavirus Concomitant Infection Causes Decreased Weight Gain in Broad-Breasted White Poults. Erica Spackman, J. Michael Day, and Mary J. Pantin-Jackwood	16
Evaluation of Transmission Route and Replication Efficiency of H9N2 Avian Influenza Virus. Huoying Shi, Shamaila Ashraf, Song Gao, Jianhong Lu, and Xiufan Liu	22
Evaluation of Nifurtimox for Potential Use in Control of Histomoniasis in Turkeys. RÜDIGER HAUCK, A. L. FULLER, GISELA GREIF, AND L. R. McDOUGALD	28
Bacteriophage Therapy for Control of Necrotic Enteritis of Broiler Chickens Experimentally Infected with Clostridium perfringens. Ross W. Miller, James Skinner, Alexander Sulakvelidze, Greg F. Mathis, and Charles L. Hofacre	33
Development of a Latex Agglutination Test for Detecting Antibodies Against Avian Influenza Virus Based on Matrix 1 Protein Expressed In Vitro. Guiping Wang, Shiffing Hu, and Xinglong Yu	41
An 8-Year Longitudinal Survey for the Presence of Antibodies to Chicken Infectious Anemia Virus in Two Specific-Pathogen-Free Strains of Chickens. K. A. Schat and Y. H. Schukken	46
Prokaryotic Recombinant Hemagglutinin-Neuraminidase Protein Enhances the Humoral Response and Efficacy of Commercial Newcastle Disease Vaccines in Chickens. Jai-Wei Lee, Ji-Ping Huang, Li-Shian Hong, Shih-Fang Shu, Chi Yu, and Chun-Yen Chu	53
Contribution of the Attachment G Glycoprotein to Pathogenicity and Immunogenicity of Avian Metapneumovirus Subgroup C. Dhanasekaran Govindarajan, Shin-Hee Kim, and Siba K. Samal	59
Morphologic Changes in the Intestine of Broiler Breeder Pullets Fed Diets Naturally Contaminated with <i>Fusarium</i> Mycotoxins With or Without Coccidial Challenge. G. N. GIRGIS, J. R. BARTA, M. BRASH, AND T. K. SMITH	67
Epidemiology and Effect on Production Parameters of an Outbreak of Inclusion Body Hepatitis in Broilers. C. Gabriel Sentíes-Cué, Robert W. Wills, Philip A. Stayer, Mark A. Burleson, and Danny L. Magee	74

About the cover

Drs. H. E. Biester (left) and L. H. Schwarte (right), professors at Iowa State University's Veterinary Medical Research Institute, were the original editors of *Diseases of Poultry*. Their leadership in development of the book extended from publication of the first edition in 1943 through the fifth edition, which was published in 1965. Although both had distinguished careers as professors and veterinarians, perhaps their most lasting contribution to avian medicine was their seminal role in the genesis of this text, now in its 12th edition, which has been the definitive resource in the field for more than 65 years.