

## CURRICULUM VITAE

W.E. BRILES, Professor of Biological Sciences

DATE: August 2011

DATE OF BIRTH: January 31, 1918

### EDUCATION:

B.A., University of Texas, Austin, 1941

Ph.D., University of Wisconsin, 1948

### AREAS OF SPECIALIZATION:

Immunogenetics; Physiological Genetics; Immunology

### PROFESSIONAL EXPERIENCE:

Assistant Professor of Poultry Science, Texas A & M University, 1948-1951

Associate Professor of Poultry Science, Texas A & M University, 1951-1957

Head of Immunogenetic Research, DeKalb AgResearch, Inc., DeKalb, IL, 1957-1970

Professor of Biological Sciences, Northern Illinois University, 1970-1987

Adjunct Professor of Biological Sciences, Northern Illinois University, 1987-to present

### MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:

American Association for the Advancement of Science (Elected Fellow)

American Association of Immunologists (Elected)

American Genetics Association

International Society for Animal Genetics

Genetics Society of America

Poultry Science Association (Elected)

Sigma Xi Society (Elected)

## HONORS:

Recipient, Poultry Science Research Prize - 1951

Honorary Member of International Society for Animal Genetics

Elected Fellow of Poultry Science Association - 1988

Recipient, Merck Award for Research Achievement in Poultry Science - 1994

Formal recognition as one of the early contributors to the study of Marek's disease at the 5th International Symposium on Marek's Disease, East Lansing, Michigan, September 1996.

W. E. Briles and Clara Ruth Briles were recognized for their contributions to avian genetics by the U.S. Department of Agriculture. October 9, 2004.

## PUBLICATIONS:

### Chapters of Books:

Briles, W.E. and R.W. Briles. 1977. Some recent recombinants at the B locus. In: A.A. Benedict (ed.), *Avian Immunology, Advances in Experimental Medicine and Biology* 88:299-307.

Stone, H.A., W.E. Briles and W.H. McGibbon. 1977. The influence of the major histocompatibility locus on Marek's Disease in the chicken. In: A.A. Benedict (ed.), *Avian Immunology, Advances in Experimental Medicine and Biology*.

Rose, N.R., L.D. Bacon, R.S. Sandick and W.E. Briles. 1978. The significance of cellular alloantigens in spontaneous autoimmune thyroiditis (SAT) of OS chickens, pp. 143-153. In: M.E. Gershwin and E.L. Cooper (eds.), *Animal Models of Comparative and Developmental Aspects of Immunity and Disease*, Pergamon Press. New York.

Briles, W.E., R.W. Briles, W.H. McGibbon and H.A. Stone. 1980. Identification of B alloalleles association with resistance to Marek's disease, pp. 395-413. In: P.B. Biggs (ed.), *Resistance and Immunity to Marek's Disease*, Commission of the European Communities, Directorate-General Scientific and Technical Information, Luxembourg.

Mashaly, M.M., L. Al-Dokhi, H.S. Siegel, A. Atta, W.E. Briles, P.B. Siegel and E.A. Dunnington. 1994. Relationship between haplotypes at the major histocompatibility complex and lymphocyte activity of chicken lines selected for high and low antibody production, pp. 105-110. In: T.F. Davison (ed.), *Advances in Avian Immunology Research*. Carfax Press, U.K.

Miller, M.M., R.M. Goto, A. Bernot, C. Auffray, R. Zoorob, N. Bumstead, P.S. Wakenell and W.E. Briles. 1994. The Rfp-Y system - A second cluster of histocompatibility genes in the chicken, pp. 95-103. In: T.F. Davison (ed.), *Advances in Avian Immunology Research*. Carfax Press, U.K.

Miller, M.M., M. Afanassieff, P.S. Wakenell, W.E. Briles, W.B. Chasse, and R.D. Swartz. 1997. Rfp-Y genotypes in populations under challenge with Marek's disease virus, pp. 47-51. In: *Current Research on Marek's Disease. Proceedings of the 5th International Symposium on Marek's Disease*, East Lansing, Michigan.

Journal Articles:

Briles, W.E., W.H. McGibbon and M.R. Irwin. 1950. On multiple alleles effecting cellular antigens in the chicken. *Genetics* 35:633-652.

Briles, W.E., Ruth W. Briles and M.R. Irwin. 1952. Differences in specificity of the antigenic products of a series of alleles in the chicken. *Genetics* 37:359-368.

Briles, W.E. 1953. The effect of heterozygosity of the blood group locus B on hatchability in three Leghorn inbred lines. *Proceedings of the Association of Southern Agricultural Workers* 1953:184.

Shultz, Fred T. and W.E. Briles. 1953. The adaptive value of blood group genes in chickens. *Genetics* 38:34-50.

Briles, W.E. 1954. Further data on the effect of the blood group locus on B on hatchability of inbred lines. *Proceedings of the Association of Southern Agricultural Workers* 1954:167.

Stutts, Ensel C., W.E. Briles and H.O. Kunkel. 1956. Blood glutathione levels and egg production in inbred lines of chickens. *Poultry Science* 35:727-728.

Stutts, Ensel C., Warren Johnson, W.E. Briles and H.O. Kunkel. 1956. Plasma alkaline phosphatase activity in mature inbred lines of chickens. *Proceedings of the Society for Experimental Biology and Medicine* 91:60-63.

Stutts, Ensel C., W.E. Briles and H.O. Kunkel. 1956. Plasma alkaline phosphatase activity in mature inbred chickens. *Poultry Science* 36:269-276.

Briles, W.E. 1956. Superiority of birds heterozygous for blood group genes. *Proceedings of the Poultry Breeders Roundtable* 1956:78-106.

Briles, W.E. 1956. Individual blood group differences in closed populations. *Proceedings of the Poultry Breeders Roundtable* 1956:32-55.

Briles, W.E. and C.P. Allen and T.W. Millen. 1957. The B blood group system of chickens. I. Heterozygosity in closed populations. *Genetics* 42:631-648.

Briles, W.E. 1960. Blood groups in chickens, their nature and utilization. *World's Poultry Science Journal* 16:223-242.

Briles, W.E. and C.P. Allen. 1961. The B blood group system of chickens. II. The effects of genotype on livability and egg production in seven commercial inbred lines. *Genetics* 46:1273-1293.

Briles, W.E. 1962. Additional blood group systems in the chicken. *The New York Academy of Sciences* 97:173-183.

Bennett, J., A.B. Woodruff, R.A. Anderson and W.E. Briles. 1962. Erythrocyte antigen genotype and behavioral traits in the chicken. *Life Sciences* 12:663-667.

Briles, W.E., C.O. Briles and J.H. Quisenberry. 1963. The C and D blood group systems in the chicken. *Poultry Science* 42:1096-1103.

Briles, W.E. 1964. Current status of blood groups in domestic birds. *Zeitschrift fur Tiersuchung und Auzhtungsbiologie: Band 70, Heft 4:371-391.*

Crittenden, L.B., W.E. Briles, and H.A. Stone. 1970. Susceptibility to an avian leukosis sarcoma virus: a close association with an erythrocyte isoantigen. *Science* 169:1324-1325.

Briles, W.E. 1970. Gene frequency profile of eleven blood group systems in three commercial inbred parent lines of chickens. *Proc. of the XIIth European Conference on Animal Blood Groups and Biochemical Polymorphisms*. Budapest, pp. 415-418. Hungarian Academy of Science.

Crittenden, L.B. and W.E. Briles. 1971. Genetic resistance to infection and oncogenesis by avian RNA tumor viruses. *Transplantation Proceedings* 3:1250-1262.

Briles, W.E. 1971. The use of isohemagglutinating reagents to assure continued genetic purity of parent lines. *World's Poultry Science Journal* 26:120-131.

Abdel-Hameed, M. Fathi, H. Joseph Neat and W.E. Briles. 1971. Differences in erythrocyte measurements of intersex and normal adult chickens. *Poultry Science* 50:1847-1854.

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Brown, K.S., W.E. Briles, and E.R. Brown. 1973. Vaccinia virus hemagglutination receptor in chickens determined by K isoantigen locus. *Proc. of the Society for Experimental Biology and Medicine* 142:16-18.

Briles, W.E. 1974. Associations between the B and R blood group loci and resistance to certain oncogenic viruses in chickens. *1st World Congress on Genetics Applied to Livestock Production*, Vol. 1:299-306.

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- Briles, W.E., R.W. Briles. 1982. Identification of haplotypes to the chicken major histocompatibility complex (B). *Immunogenetics* 15:449-459.
- Briles, W.E., N. Bumstead, D.L. Ewert, D.G. Gilmour, J. Gogusev, K. Hala, C. Koch, B.M. Longenecker, A.W. Nordskog, J.R.L. Pink, L.W. Schierman, M. Simonsen, A. Toivanen, P. Toivanen, O. Vainic and G. Wick. 1982. Nomenclature for major histocompatibility (B) complex. *Immunogenetics* 15:441-447.
- Brown, D.W., W.M. Collins, P.H. Ward and W.E. Briles. 1982. Complementation of major histocompatibility haplotypes in regression of RSV-induced tumors in noninbred chickens. *Poultry Science* 61:409-413.
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Collins, W.M., D.W. Brown, P.H. Ward, W.R. Dunlop, and W.E. Briles. 1985. MHC and non-MHC genetic influences on Rous sarcoma metastasis in chickens. *Immunogenetics* 22:315-321.

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Collins, W.M., N.P. Zervas, W.E. Urban, Jr., W.E. Briles, and P.A. Aeed, 1985. Response of the B complex haplotypes B22, B24, and B26 to Rous sarcomas. *Poultry Science* 64:2017-2019.

Ehrich, M., R.W. Briles, W.E. Briles, E.A. Dunnington, A.G. Martin, P.B. Siegel and W.B. Gross, 1986. Neurotoxicity of triorthotolyl phosphate (TOTP) in chickens of different genotypes in the presence and absence of dexamethasone. *Poultry Science* 65:375-379.

Collins, W.M., W.R. Dunlop, R.M. Zsigray, R.W. Briles and R.M. Fite, 1986. Dissemination of Rous sarcomas in chickens is influenced by the major histocompatibility complex and sex. *Poultry Science* 65:1642-1648.

Dunnington, E.A., A. Martin, W.E. Briles, R.W. Briles and P.B. Siegel. 1986. Resistance to Marek's disease in chickens selected for high and low antibody responses to sheep red blood cells. *Archives fur Geflugelkund* 50:94-96.

Martin, A., W.B. Gross, E.A. Dunnington, R.W. Briles, W.E. Briles and P.B. Siegel. 1986. Resistance to natural and controlled exposures to *Eimeria tenella*: Genetic variation and alloantigen systems. *Poultry Science* 65:1847-1852.

Cotter, P.F., R.L. Taylor, Jr., T.L. Wing and W.E. Briles. 1987. B complex (MHC) associated differences in the delayed wattle reaction to Staphylococcal antigen. *Poultry Science* 66:203-208.

Briles, W.E. and R.W. Briles. 1987. Genetics and classification of the major histocompatibility complex antigens of the chicken. *Poultry Science* 66:776-781.

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Taylor, R.L., Jr., P.F. Cotter, T.L. Wing, and W.E. Briles. 1987. Major histocompatibility (B) complex and sex effects on the phytohemagglutinin wattle response. *Animal Genetics* 18:343-350.

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Kline, Kimberly, W.E. Briles, Larry Bacon and Bob G. Sanders. 1988. Characterization of two distinct disulfide-linked B-G molecules in chickens. *Journal of Heredity* 79:249-256.

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Hyun S. Lillehoj, Mark C. Jenkins, L.D. Bacon, Raymond H. Fetterer, and W.E. Briles. 1988. *Eimeria acervulina*: Evaluation of the cellular and antibody responses to the recombinant coccidial antigens in B-congenic chickens. *Experimental Parasitology* 67:148-158.

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#### OTHER PROFESSIONAL INFORMATION:

Member of Expert Panel of Blood Group Scientist of the Food and Agricultural Organization of the United Nations, 1963-1981.

Invited conferee and lecturer at the World Congress on Genetics Applied to Animal Production, Madrid 1974.

Invited conferee and lecturer at an international conference on Avian Immunology (A.A. Benedict, convener) University of Hawaii, 1977.

Invited participant and lecturer at an international conference under the sponsorship of the of the European Common Market on "Resistance and Immunity to Marek's Disease," Berlin, 1978.

Participant in workshop on nomenclature for the chicken major histocompatibility complex held at the Institute for General and Experimental Pathology, Innsbruck, Austria, 1981.

Member of editorial board of "Animal Blood Groups and Biochemical Genetics", International Society for Animal Blood Group Research, 1978-1988.

Contributing member of NE-60, a technical committee for a project sponsored by USDA to study the genetic bases of avian diseases.

Associate Editor of *Poultry Science*, 1988-1993.

Member of Editorial Board of *Immunogenetics*, 1990-2000.