EXHIBIT "C" DR. RONALD H. MATSON, PH.D.

AFFIDAVIT OF Dr. RONALD H. MATSON, Ph.D.

BEFORE ME the undersigned authorized to administer oaths, appeared Dr. Ronald H. Matson, Ph.D. who, after first being duly sworn, deposes and states as follows:

1.

My name is Dr. Ronald H. Matson, Ph.D. I am over the age of 18 years and otherwise competent to give this affidavit.

2

I am Professor of Biology at Kennesaw State University. I teach several undergraduate courses in Biology including Evolution.

3.

I received my Ph.D. in Biology from the University of California, Los Angeles in 1987.

4.

I have taught for 14 years at Kennesaw State University.

5.

Attached is my curriculum vitae.

6.

I have published articles in national and international peer-reviewed journals on vertebrate evolution, phylogenetic systematics, population genetics and isozymes.

7.

I am an expert in the areas of vertebrate evolution and systematics (the study of biodiversity and the evolutionary relationships that exist among organisms).

8.

In science class, science is defined as a way of knowing that seeks answers to questions about the natural world. Science demands natural explanations for natural phenomena based on observations and empirical data. Science does not accept supernatural or purely hypothetical explanations. In science, proposed answers to questions – whether they are called hypotheses, theories, laws or principles - must be capable of being tested and capable of being disproved (falsified). It is a self-correcting enterprise. This means that over time is statements become evermore probable and the accepted statements of science are those that have not been falsified.

9.

The scientific method is a way of determining casual relations among natural phenomena by formulating potentially falsifiable hypotheses, making predictions and testing those predictions.

10.

In science, the word "theory" has a special and specific meaning. When used in the context of "the atomic theory", "the theory of gravity" or "the theory of evolution", "theory" means a unifying concept, a hypothesis that is supported by many independent pieces of data. A theory provides powerful explanations about natural phenomena and allows scientists to make and test

predictions about the natural world. A theory provides a conceptual framework that ties together the disparate facts and ideas and helps unify a scientific discipline.

11

I am familiar with the disclaimer placed in Cobb County School science textbooks that provide some information on evolution.

12

I am not aware of any other theory being disclaimed in these texts.

13.

In science, evolutionary theory is on par with the theory of gravity, the germ theory of disease, Newtonian physics, Galilean heliocentrism, plate tectonics, and atomic theory, to name but a few.

14.

Apparently, the Cobb County School Board does not want its students to think critically about any of these other issues. Stickers were not placed in physics or chemistry books nor were they put in books dealing with topics outside science that may have "theories" (e.g., history or economics).

15.

Apparently, the Cobb County School Board does not want its students to approach any of these other issues with an open mind. Stickers were not required textbooks in other disciplines.

16.

Apparently, the Cobb County School Board does not disclaim any of these other theories as only theories, not accepted fact.

17.

There is no scientific dispute over whether evolution occurs.

18.

There is no scientific dispute over whether aspects of evolution are considered as a fact.

19.

The "facts" of evolution are those observations that can be demonstrated in the fossil record and in the laboratory. For example, it is consider a "fact" of evolution that that species change over time. It is a fact that mutations occur and that some of them increase the chances of survival for an organism.

20.

No credible biologist disputes that evolution occurs. The "scientists" who argue for creationism/intelligent design are usually not scientists (e.g., they are engineers or medical doctors). Those who are scientists usually have no training in biology or evolution (e.g., many are chemists). These people do not have the *bona fides* to discuss the nature and philosophy of science or the details of evolutionary theory. They often resort to taking data, ideas and sentences out of context in order to promote their perspective.

No credible scientist in any field that works with evolution disputes that importance and centrality of evolution. Controversies in evolutionary biology come about when biologists try to test hypotheses of relationships or to when trying to explain how these changes came about (i.e., was it natural selection and/or some other mechanisms). The controversies are not about whether evolution occurs and no qualified scientist questions the importance or reality of biological evolution. Furthermore, an understanding of evolution is important in solving certain problems we face. For example, the relatively new field of "Darwinian Medicine" provides us with important new avenues to understand and control major diseases such as those caused by the HIV virus, the TB bacterium, the malaria parasite and the West Nile virus. Much of the pharmaceutical and biotechnology industries would not exist if it weren't for the work done by evolutionary biologists (e.g., the development of the technique known as PCR resulted, in part, from the discoveries made by microbiologists studying the evolution of bacteria). Furthermore, major problems in conservation biology cannot be solved without understanding of how biological evolution works.

22.

The argument contained in the disclaimer that evolution is "only a theory" comes solely from proponents of Intelligent Design/Creationism who want to imply that, because of the word "theory", the concept of biological evolution highly speculative or that biologists are uncertain as to its importance or value in biology. They fail to acknowledge that there are multiple definitions of the word "theory" and rely on the common usage (which is inappropriate in this context).

23.

Intelligent Designers/Creationist uses the terms microevolution and macroevolution in a misleading way. Microevolution and macroevolution are part of a continuum. Our understanding of macroevolution is based on the mechanisms of microevolution. While Intelligent Designers/Creationist acknowledge the reality of microevolution, they fail to understand that macroevolution is simply a continuation of microevolution.

24

Intelligent Design/Creationism is not science.

25.

Intelligent Design/Creationism is not science because it starts with a known answer to questions - God or the "Intelligent Designer" is responsible for what we observe and measure in the natural world. In science, proposed answers to questions – whether they are called hypotheses, theories, laws or principles - must be capable of being tested and capable of being disproved. It is not possible to falsify the hypothesis that "God" or an "Intelligent Designer" is responsible for a particular observation. Therefore answers to questions that invoke "God" or an "Intelligent Designer" are inherently unscientific. Furthermore, intelligent design/creationism do not promote the making of predictions, another hallmark of science. Intelligent design/creationism does not encourage scientists to ask questions, to look for answers or to be skeptical.

26.

Intelligent Design/Creationism is based on religious doctrine. It depends upon references to an "Intelligent Designer" or to God. Because reference to God (or an Intelligent Designer or any other supernatural prime mover) is inherently religious and clearly outside the realm of science, the ideas of intelligent design/creationism must be considered religious, not scientific. Furthermore, many of the people who actively promote Biblical creationism have acknowledged that intelligent design is part of a religious movement and is of value in promulgating a certain

religious point of view. For example, Dr. Henry Morris of the Institute of Creation Science wrote: "It is obvious that neither "intelligent design" nor "irreducible complexity" nor any other such euphemism for creation will suffice to separate a thorough-going Darwinian naturalist from his atheistic religion, in favor of God and special creation." (http://www.icr.org/pubs/btg-a/btg-127a.htm) (emphasis mine). While Dr. Morris and others may think that "Intelligent Design" doesn't go far enough in terms of their religious beliefs, it is clear that they agree that the "Intelligent Design" movement has religious underpinnings and is of value in promulgating a certain religious point of view.

FURTHER AFFIANT SAYETH NOT

Dr. Ronàld H. Matson, Ph.D.

Sworn to and subscribed before me this 9th day of August, 2003

NOTARY PUBLIC

CURRICULUM VITAE -- Ronald H. Matson

Current Position

Professor of Biology, Kennesaw State University (KSU)

Acting Chair, Department of Biological and Physical Sciences, KSU

Address

Department of Biological and Physical Sciences, Kennesaw State University, 1000 Chastain Rd., #1202, Kennesaw, GA 30144-5591, USA

Phone: 770.423.6508

Fax: 770.423.6625

e-mail: rmatson@kennesaw.edu

URL: http://science.kennesaw.edu/~rmatson

Education

Ph.D. 1987 (Biology) -- University of California, Los Angeles (UCLA)

M.S. 1980 (Biology) -- California State University, Long Beach (CSULB)

B.S. 1976 (Zoology) -- California State University, Long Beach

Postdoctoral Scientist 1987-1989 -- University of Alabama, Tuscaloosa

Teaching Experience

Kennesaw State University (1989 - present):

General Biology I (Biology 103)

General Biology II (Biology 104)

Human Anatomy & Physiology Lab I (Biology 2221L)

Biological Principles I (Biology 2200)

Biology of the Dinosaurs (Biology 490 and Biology 4490)

Comparative Vertebrate Anatomy (Biology 3350 and Biology 3350L)

Evolution and Biosystematics (Biology 3380)

Land and People of Australia (Biology 4490)

Scientific Principles and Processes I (Science 2205)

Scientific Principles and Processes II (Science 1102)

Vertebrate Zoology (Biology 3315 and Biology 3315L)

Temporary Faculty, Department of Biology, University of Alabama

Seminar: "Electrophoresis for Systematists" (1989).

Teaching Fellow, Department of Biology, UCLA (1981-1987):

Biology of Organisms

Biology of the Vertebrates

Cellular Physiology

Evolution, Ecology and Behavior

Herpetology

Vertebrate Morphology

Teaching Assistant, Department of Biology, CSULB (1978-1980):

General Botany

Human Anatomy and Physiology

Guest Lecturer: UCLA Animation Workshop, "Moving with Style: Anatomy and Motion Analysis for Animators". Topic: *Flight*.

Dissertation and Thesis

Matson, R. H. 1987. Biochemical Genetics and Systematic Applications of Avian Isozyme Characters. Unpublished Ph.D. dissertation, UCLA.

Matson, R. H. 1980. Genetic variation in two insular populations of the house finch, *Carpodacus mexicanus* (Aves: Fringillidae). Unpublished Masters thesis, CSULB.

Research Interests

Vertebrate evolution and biodiversity

Faunal surveys of streams and life history studies of fishes

Biochemical genetics and systematics of birds and fishes

Tissue specific gene expression

Service

Assistant Chair, Dept. of Biological and Physical Sciences, KSU - 1993-2002

Acting Assistant to the Vice President for Academic Affairs - Spring & Summer 2002.

Past Editor, Isozyme Bulletin 1994-1996.

Reviewer of journal articles for:

The Auk

Biochemical Genetics

Biochemical Systematics and Ecology

Comparative Biochemistry and Physiology

The Condor

Copeia

Stain Technology

Systematic Zoology

Biology Department Search Committees -- 1997-1998; Chair, 1998-1999; Chair 1999-2000.

Biology Department Workload Committee -- 1992-1993; 1998-2000.

Biology Department Strategic Planning Committee -- 1994-1998; Chair 1998-2002.

Biology Department Curriculum Coordinating Committee -- Secretary, 1989-1990; Chair, 1990-1997; ex officio 1998-2001.

Biology Department Science Core Committee -- 1991-1993; 1998-2000.

Biology Department Curriculum Assessment Committee -- 1991-1995.

Biology Department Cytogenetics Internship Scholarship Committee -- 1989-1993.

Departmental Representative to Teaching Faculty Retreat -- 1990.

College of Science & Mathematics Tenure & Promotion Committee -- 1999-2001; 2002. Chair 2000-2001.

School of Allied Health and Sciences, Special Events Committee -- 1990-1991.

Search Committee - Dean of Undergraduate Studies -- 2000-2001.

University Program Review Committee – 2002.

University Grievance Policy Subcommittee -- Chair, 1996-2000.

 $University\ Academic\ Standing\ Committee-2000-2002.$

University Academic Advising Council -- 1998- 2003.

University Tenure & Promotion Oversight Committee -- 2000-2001.

University Senate -- 1994-1995; 2001-2002. Member of Executive Committee 1995-1996; 2001-2002.

University Undergraduate Policy Subcommittee -- 1991-1995; Chair, 1992-1996.

University Faculty Evaluation Committee -- 1991-1993.

University Environmental Concerns Committee -- 1992-1993 (acting chair Spring 1993); Education Subcommittee, Chair -- 1992-1993.

University Judiciary -- 1992-1995.

University Alternative Dispute Resolution Committee -- 1995-1996.

University Undergraduate Curriculum and Policy Committee -- 1993-1995. Chair, 1994-1995.

University Library Committee -- 1990-1992.

Leadership Kennesaw State -- 1990-1991.

Banner Focus Group, Board of Regents -- 1999.

Cherokee Co. Teachers Workshop -- 1998.

Chair, Storer Award Committee. 70th Annual Meeting of the American Society of Ichthyologists and Herpetologists. Charleston, SC. 1990.

Reviewer for: <u>Birds</u>. *In*: Bibliography of Electrophoretic Studies of Biochemical Variation in Natural Vertebrate Populations. Savannah River Ecology Laboratory. 1990.

Reviewer for: National Science Foundation, Population Biology Program.

Honors and Awards

College of Science and Mathematics Distinguished Advising Award, 2001.

NACADA Outstanding Advisor Award, 2000.

Distinguished Service Award, KSU College of Science and Mathematics, 1999.

KSU Outstanding Academic Advisor Award, 1998-1999; 1999-2000.

Honors Faculty Status, KSU. 1998.

Certificate of Appreciation for Academic Advising. 1998, 1999.

Service Award in the College of Science and Mathematics (Nomination), 1998.

KSU Faculty Service Award (Nomination), 1995-1996; 1999-2000 (finalist); 2001-2002 (finalist).

KSU Distinguished Teaching Award (Nomination), 1989-1990, 1991-1992, 1995-1996, 1998-1999.

Schechtman Award (for Distinguished Teaching Assistant), Dept. of Biology, UCLA. 1986.

Johnson Award (for Distinguished Research; Honorable Mention), School of Natural Sciences, CSULB. 1980.

Grants

NSF Doctoral Dissertation Research Grant (\$7800), 1985.

UCLA Department of Biology:

UCLA Travel Grant, 1986.

Organismic Animal Biology Fund Grant, 1981, 1982, 1985.

UCLA Travel and Research Grant, 1982, 1983.

Research Grant for a Computerized Bibliographic Search, 1981.

Frank M. Chapman Memorial Grant, American Museum of Natural History. 1977.

Societies

American Association for the Advancement of Science

American Ornithologists Union

American Society of Ichthyologists and Herpetologists

Cooper Ornithological Society

NACADA

Sigma Xi

Society of Systematic Biology

Southeastern Fishes Council

Invited Presentations

Kennesaw State University, GA; 1999. Title: "From Plate Tectonics to Koala Bears: A Natural History of Australia".

Berry College, Rome, GA; 1990. Title: "Ldh-X, Is it an avian character?"

Georgia Southern College, Statesboro, GA: 1989. Title: "Ldh- X, Is it an avian character?"

Invited Symposium Presentations

Matson, R. H. 1985. Tissue-specific gene expression in *Sphenodon punctatus*. Gene Expression in Reptilian Systematics. American Association for the Advancement of Science, Los Angeles, CA.

Matson, R. H. 1985. Application of isozyme characters in avian systematics. Third International Congress of Systematic and Evolutionary Biology. Univ. of Sussex, Brighton, England.

Contributed Papers and Abstracts

Smith, B., R. Matson, S. McCullagh and G. Smith. 2000. Lands and Peoples of Australia: A Lesson in Collaborative Teaching. 7th Annual Georgia Conference on College & University Teaching. Kennesaw, GA.

Mayden, R. L., R. M. Woods, S. R. Layman and R. H. Matson. 1992. Systematics and Biogeography of the *Notropis rubellus* species complex. American Society of Ichthyologists and Herpetologists. University of Illinois, Champaign-Urbana.

- Matson, R. H., R. L. Mayden and B. R. Kuhajda. 1989. Allozyme differentiation in populations of the Rainbow Shiner, *Notropis chrosomus* 50th Annual Meeting of the Association of Southeastern Biologists. Charlotte, NC.
- Matson, R. H., R. L. Mayden, and B. R. Kuhajda. 1989. Electrophoretic comparisons of populations of *Notropis chrosomus* from the Mobile Bay Basin. American Society of Ichthyologists and Herpetologists. San Francisco State University, San Francisco, CA.
- Kuhajda, B. R., R. L. Mayden and R. H. Matson. 1989. Meristic comparisons between populations of *Notropis chrosomus* from the Mobile Bay Basin. American Society of Ichthyologists and Herpetologists. San Francisco State University, San Francisco, CA.
- Mayden, R. L., R. H. Matson and D. M. Hillis. 1989. Speciation in the cyprinid genus *Dionda*. American Society of Ichthyologists and Herpetologists. San Francisco State University, San Francisco, CA.
- Matson, R. H., and R. L. Mayden. 1988. Genetic variation in Southeastern populations of *Notropis leuciodus*. American Society of Ichthyologists and Herpetologists. Univ. of Michigan, Ann Arbor, MI.
- Mayden, R. L. and R. H. Matson. 1988. Evolutionary relationships of eastern North American cyprinids. American Society of Ichthyologists and Herpetologists. Univ. of Michigan, Ann Arbor, MI.
- Mayden, R. L., and R. H. Matson. 1988. Preliminary analysis of systematic placement *Notropis rubellus* (Cyprinidae). 49th Annual Meeting of the Association of Southeastern Biologists. Biloxi, MS.
- Matson, R. H. 1986. Isozyme characters of *Sphenodon punctatus* and their use in phylogenetic analyses of reptiles. 66th Meeting of the American Society of Ichthyologists and Herpetologists. Univ. of Victoria, Victoria, British Columbia, Canada.
- Matson, R. H. 1985. "Ldh-X": is it an avian character? 103rd Meeting of the American Onrithologists' Union. Arizona State University, Tempe, AZ.

Publications

- Matson, R. H. 1999. Limitations to the Use of Tissue-Specific Gene Expression Characters in the Phylogenetic Analyses of Non-Avian Reptiles. Biochemical Systematics and Ecology 27:213-222.
- Coelho, M. M., M. J. Alves, M. J. Collares-Periera, and R. H. Matson. 1997. Allozyme analysis and the controversial generic status of Iberian species *Chondrostoma lemmingii* and *C. lusitanicum* (Pices: Cyprinidae). Folia Zool. 46 (Suppl.1): 15-26.

Mayden, R. L. and R. H. Matson. 1992. Systematics and biogeography of the Tennessee shiner *Notropis leuciodus* (Cope) (Teleostei: Cyprinidae). Copeia 1992: 954-968.

Mayden, R. L., R. H. Matson, and D. R. Hillis. 1992. Speciation in the North American Genus *Dionda*. pp. 710-746. *In*: Mayden, R. L. (Ed.). Systematics, Historical Ecology and North American Freshwater Fishes. Stanford University Press.

Matson, R. H. 1991. Fructose-bisphosphatase in birds. Isozyme Bulletin 24:28.

Matson, R. H. 1989. Avian peptidase isozymes: tissue distributions, substrate affinities and assignment of homology. Biochem. Genet. 27:137-151.

Matson, R. H. 1989. Distribution of the testis-specific Ldh-X among avian taxa with comments on the evolution of the Ldh gene family. Syst. Zool. 38: 106-115.

Mayden, R. L., R. H. Matson, B. R. Kuhajda, J. M. Pierson, M. F. Mettee, and K. S. Frazer. 1989. The chestnut lamprey, *Ichthyomyzon castaneus* Girard, in the Mobile Basin. Proceedings of the Southeastern Fishes Council. 20:10-13.

Matson, R. H., R. L., Mayden and B. R. Kuhajda. 1989. Allozyme differentiation in the rainbow shiner, *Notropis chrosomus*. Isozyme Bulletin. 22: 73.

Matson, R. H. 1988. Agnathan triosephosphate isomerase. Isozyme Bulletin 21: 189

Matson, R. H. 1987. Mannose-6-phosphate isomerase in birds. Isozyme Bulletin 20: 25.

Matson, R. H. 1986. "Ldh-X": is it an "avian character?" Isozyme Bulletin 19: 17

Murphy, R. W. and R. H. Matson. 1986. Evolution of isozyme characters in the tuatara, *Sphenodon punctatus*. New Zealand Journal of Zoology 13: 573-581.

Matson, R. H., C. B. Crabtree, and T. R. Haglund. 1986. Ichthyofaunal composition and recolonization in a central California tidepool. Calif. Fish and Game 72: 227-231.

Matson, R. H. 1984. Applications of electrophoretic data in avian systematics. Auk 101: 717-729.

Technical Reports

Matson, R. H. 1993. An assessment of the ichthyofaunal composition of streams draining into Lake Allatoona. Submitted as part of the Clean Lakes Grant under the auspices of the Burruss Institute at KSU.