

CHERYL DIANE DAVIS

Office of Research & Creative Activity
Western Kentucky University
1906 College Heights Blvd.
Bowling Green, KY 42101
Email: cheryl.davis@wku.edu
Phone: (270) 745-2712

EDUCATION

1988 Ph.D. Biology, Wake Forest University, North Carolina
1983 M.S. Zoology, University of Oklahoma, Oklahoma
1979 B.S. Zoology, University of Oklahoma, Oklahoma

ACADEMIC & ADMINISTRATIVE POSITIONS

Western Kentucky University

Present Associate Provost for Research & Creative Activity (from 9/1/16)
Present University Distinguished Professor, Department of Biology (from 8/15/08)
2002-08 Professor, Department of Biology
1997-02 Associate Professor, Department of Biology
1991-97 Assistant Professor, Department of Biology

Wake Forest University

1988-91 PostDoctoral Fellow, Department of Biology
1987 Instructor, Department of Biology

ELECTED LEADERSHIP POSITIONS

2014-18 Council Member at Large, American Society of Parasitologists
2013-14 Immediate Past-President, Kentucky Academy of Science
2012-13 President, Kentucky Academy of Science
2011-12 President Elect, Kentucky Academy of Science
2010-11 Vice President, Kentucky Academy of Science
2008-11 Governing Board, Kentucky Academy of Science
2004-05 Chair, Molecular & Cell Biology Section, Kentucky Academy of Science
2001-02 President, Southeastern Society of Parasitologists
2000-01 President Elect, Southeastern Society of Parasitologists
1998-99 Vice President, Southeastern Society of Parasitologists

AWARDS & HONORS

2011 Honorary Member of Alpha Epsilon Delta
2008 University Distinguished Professorship
2003 Ogden College Faculty Award in Teaching

- 2000 Excellence in Teaching Award, Student Government Association, Western Kentucky University
- 1999 Honorary Member of Golden Key National Honor Society, 1999
- 1986 Byrd-Dunn Award, Outstanding Research Presentation, Southeastern Society of Parasitologists

PROFESSIONAL AFFILIATIONS

American Society of Parasitologists
Southeastern Society of Parasitologists
Kentucky Academy of Sciences
Council on Undergraduate Research
National Council of University Research Administrators
Association of University Technology Managers

SERVICE TO PROFESSIONAL ORGANIZATIONS

American Society of Parasitologists

- 2014-18 Council Member at Large
- 2011-12 Chair-Ashton Cuckler New Investigator Award Committee
- 2010-11 Chair-Ashton Cuckler New Investigator Award Committee
- 2009-10 Ashton Cuckler New Investigator Award Committee
- 2008-09 Chair-Mentor Award Committee
- 2005-06 Mentor Award Committee
- 2003-04 Nominating Committee
- 2001-02 Chair-Mentor Award Committee
- 2000-01 Nominating Committee
- 2000-01 Mentor Award Committee
- 1998-99 Mentor Award Committee
- 1996-97 Local Arrangements Committee
- 1995-96 Nominating Committee

Southeastern Society of Parasitologists

- 2012-15 Chair Auditing Committee
- 2012-13 Chair, Local Arrangements Committee
- 2005-06 Member, Nominating Committee
- 2004-05 Chair, Meritorious Service Award Committee
- 2000-01 Program Officer
- 1998-99 Chair Byrd-Dunn Awards Committee
- 1996-97 Chair, Resolutions Committee
- 1995-97 Chair, Auditing Committee
- 1991-92 Chair, Auditing Committee

PROFESSIONAL PEER-REVIEW

Scientific Journals

Journal of Parasitology
International Journal of Parasitology
Journal of Eukaryotic Microbiology
Journal of Zoo and Wildlife Medicine
Journal of the Kentucky Academy of Sciences

Grants/Programs

External Program Review for Graduate Program in Biology – Western Carolina University
External Reviewer for CINSAM Grant Program – Northern Kentucky University
External Reviewer for Baker Fund Grant Program – University of Ohio
Kentucky Academy of Sciences Grant Program- Reviewer
Kentucky Biomedical Research Infrastructure Network (KBRIN) Grant Program – Reviewer

UNIVERSITY SERVICE

2017-2018	Co-Chair, Provost and V.P. for Academic Affairs Search Committee
2017-2018	Research, Scholarship and Creative Endeavors Strategic Planning Work Group
2016-present	Western Kentucky University Research Foundation Board Member
2015-present	Council of Academic Deans (<i>ex officio</i>)
2015-present	Student Research Council (<i>ex officio</i>)
2015-2017	Honorary Doctorate Degree Review Committee
2013-2015	Graduate Council
2013-2015	Graduate Faculty Committee of Graduate Council
2013-2014	Academic Coordinator BPMCT Program (Search Committee Member)
2013-2014	Director of Gatton Academy of Mathematics and Science (Search Committee Member)
2011 & 2013	University Distinguished Professorship Selection Committee
2010-2011	Faculty Award for Research/Creativity (University Committee)
2009-2011	Honorary Doctorate Degree Review Committee
2009-2010	Provost and V.P. for Academic Affairs Search Committee
2008-2009	President's Task Force on Quality and Access
2003-2004	Alternate to Academic Council
2002-present	Lead Faculty Representative, KBRIN/INBRE Program
2001-2002	Chair, Graduate Student Research Committee of Graduate Council
2001	Established WKU Institutional Bio-safety Committee
2000-2001	Graduate Faculty Committee of Graduate Council
2000-2001	Academic Complaint Committee
1998-2012	Pre-Medical Advisory Committee
1998-2003	Graduate Council
1998-1999	Rules Committee of Academic Council
1998-1999	Graduate Student Research Committee of Graduate Council
1997-1999	Academic Council
1997-1998	General Education Review Committee of Academic Council
1994-1998	Alternate to Graduate Council
1995-1997	University Academic Probation Committee
1994-1997	Alternate to Academic Council

1992-2013 Member, Institutional Animal Care and Use Committee
 1992-2006 Chair, Institutional Animal Care and Use Committee
 1992-1994 University Academic Probation Committee

DEPARTMENTAL SERVICE

2013-2017 Biotechnology Center Executive Committee
 2012-2017 Advisor (Biology Majors Seeking Secondary Education Certification; MAE in Biology Students; MAT Students)
 2011-2012 Chair, Food Microbiologist Search Committee
 2009-present Mentor to Junior Faculty
 2009-2011 Executive Committee (Member 2009-1010; Chair 2010-2011)
 2008-2009 Evolutionary Biologist Search Committee
 2008-2009 Plant Molecular Biologist (Owensboro) Search Committee
 2006-2007 Recombinant Genetics Curriculum Revision Committee
 2005-2007 Chair, Biology 121 Revision Committee
 2005-2006 Sygen Chair in Biotechnology Search Committee
 2005-2006 Departmental Program Review Committee
 2004-2005 Chair, Neuroscientist Search Committee
 2003-2005 Biology Instructor Search Committee
 2002-present Faculty Supervisor for Biology 121 G.T.A.s
 2002-2003 Functional Morphologist Search Committee
 2001-2002 Departmental Assessment Committee
 2001-2002 Cell Biologist Search Committee
 2000 Department Head Search Committee
 1998-1999 Chair, Vascular Plant Systematics Search Committee
 1997-2003 Departmental Curriculum Committee
 1997-2003 Chair, Graduate Committee
 1996 Departmental Space and Facilities Committee
 1996 Chair, Cell/Ultra-structure Search Committee
 1995 Department Head Search Committee
 1995 Chair, Microbiologist Search Committee
 1994 Microbiologist Search Committee
 1994-present Departmental Graduate Committee
 1993 Chair, Population Biologist Search Committee
 1992 Departmental SACS Committee
 1992-1996 Departmental Strategic Planning Committee
 1991-1996 Departmental Molecular Biology Committee
 1991-1994 Departmental Assessment Committee

TEACHING EXPERIENCE

Western Kentucky University

Biological Concepts
 Biological Concepts Laboratory
 General Microbiology

Parasitology
 Parasitology Laboratory
 Advanced Immunology

Intro to Molecular Biology
Intro to Molecular Biology Laboratory
Intro to Molecular and Cell Biology
Intro to Molecular and Cell Biology Laboratory
Immunology
Immunology Laboratory
Comparative Immunology

Advanced Immunology (on-line)
Undergraduate Seminar
Cells and Tissues (Biotech Core I)
Animal Pathology
Human Parasitology (on-line)

Wake Forest University
Biological Principles

RESEARCH INTERESTS

Parasitic and Tick-borne Disease Surveillance; Immunobiology of Host-Parasite Relationships

Ph.D. DISSERTATION

1988. Molecular interactions between *Trypanosoma cruzi* and murine host cells. Ph.D. Dissertation, Wake Forest University, Winston-Salem, North Carolina

M.S. THESIS

1983. Monoclonal antibody analysis of antigens from larval *Schistosoma mansoni*. M.S. Thesis, University of Oklahoma, Norman, Oklahoma

GRADUATE STUDENTS

Master's Degree Students/ Thesis Advisor

Kayla Pittman Wielgus. Current. Prevalence and mean intensity of *Baylisascaris procyonis* in raccoons (*Procyon lotor*) in Kentucky.

LiPeng Bi. May 2010. Molecular characterization of isolates of *Trypanosoma cruzi* obtained from raccoons (*Procyon lotor*) trapped in Warren and Barren counties of Kentucky.

Kristina Tackett. December 2009. The Lyme disease spirochete, *Borrelia burgdorferi*, in tick species collected from raccoons (*Procyon lotor*) and opossums (*Didelphis virginiana*) trapped in the Warren and Barren counties of south central Kentucky.

Sanjay Varikuti. August 2009. Role of CD4+CD25+ regulatory T lymphocytes in experimental toxoplasmosis.

Brian Chad Groce. August 2008. *Trypanosoma cruzi* in wild raccoons and opossums from Kentucky.

Vipula Petluru. 2007. Quantification of nitric oxide and inducible nitric oxide synthase in a murine model of experimental toxoplasmosis.

Dong Chen. 2001. Effects of antioxidant supplementation with vitamin E and selenium on cytokine production in mice infected with *Trypanosoma cruzi*.

Savonna Warren. 2001. The effect of lead acetate on the susceptibility of C3HeB/FeJ mice infected with the parasite, *Trypanosoma cruzi*.

Susan McCarthy. 1999. Increased severity of murine infection with *Toxoplasma gondii* following vitamin E and selenium supplementation.

Karen Powell. 1997. Adoptive transfer of immunity to *Trypanosoma cruzi* infection in mice.

Yue Hou. 1997. The beneficial effect of vitamin E and selenium during experimental Chagas' disease.

Tabitha Ellis. 1996. The effects of lead acetate on host susceptibility to *Trypanosoma cruzi*.

Ahmed Arif. 1996. Antibody response to heat shock proteins of *Trypanosoma cruzi* and histopathology in mice maintained at elevated environmental temperature.

Lianyong Gao. 1995. Antibody response to *Trypanosoma cruzi* infection in mice held at elevated environmental temperature.

Brenda Bennett. 1995. The effect of dietary supplementation vitamin E and selenium on experimental Chagas' disease.

Qi Guo. 1994. The role of CD4+ T cells in the immune response to *Trypanosoma cruzi* in mice held at elevated environmental temperature.

Zhijun Ming. 1994. The role of CD8+ T cells in the immune response to *Trypanosoma cruzi* in mice held at elevated environmental temperature.

Master's Degree Students/ Non-Thesis Advisor

May 2016	Noura Al dosari
May 2014	Ty Lebsack
August 2013	Bridget Curry
May 2013	Lora Wellman
May 2012	Jean Miller
May 2012	Neelima Gajavilli
August 2009	Cassandra Cantrell
May 2005	Kiran Padigala
August 2004	Jennifer Lyon
May 2004	Jerri Farley
May 2004	Lisa Cecil
August 2003	Nandakumar Bangalore-Vittal
August 1996	Michael Mattingly
May 1996	David Helm

MAE Biology Students/ Advisor

Dec 2014	Lalenia Mettle
Dec 2005	Katherine Moss
August 2004	Penny Becker
May 2004	Tara Logsdon

Doctoral Students / Dissertation Committee Member

Samuel Hunt. August 2014. Toward a more perfect definition of learning: Using biomarkers to predict and assess learning performance. Ed.D. Dissertation, Educational Leadership, Western Kentucky University.

Karen Powell. August 2010. The effects of estrogen and phytoestrogens on focal infarct, PTEN, and p-AKT expression in aged rats. Ph.D. Dissertation, Department of Biology, University of Louisville.

GRANTS/CONTRACTS:

May 1, 2014 – April 30, 2019

NIH-INBRE 3

Western Kentucky University Lead Faculty Representative

Funded (WKU Subcontract): (~\$433,000 per year)

May 1, 2009-April 30, 2014

NIH-INBRE 2

Western Kentucky University Lead Faculty Representative

Funded (WKU Subcontract): ~\$280,000 per year

June 1, 2005-May 31, 2007

NSF EPSCoR-Research Start-Up Fund

Title: Neuroscience Assistant Professor

Funded: \$75,000

July 1, 2004- June 30, 2009

NIH-INBRE 1

Western Kentucky University Lead Faculty Representative

Funded (WKU Subcontract): ~\$534,000 per year

January 2001 – June 30, 2004

NIH- BRIN (KBRIN)

Western Kentucky University Lead Faculty Representative

Funded (WKU Subcontract): \$55,000 YO1; \$197,460 YO2, \$197,460 YO3

PUBLICATIONS (student co-authors*):

Yoshino, T.P. and C.D. Davis. 1983. Surface antigens of *Biomphalaria glabrata* hemocytes (Gastropoda) II. Evidence for linkage independence of some hemolymph-like surface antigens and Con A receptor-bearing macromolecules. J. Invertebr. Pathol. 42: 8-16.

Davis, C.D. and R.E. Kuhn. 1990. Selective binding of *Trypanosoma cruzi* to host cell membrane polypeptides. Infect. Immun. 58: 1-6.

Davis, C.D. and R.E. Kuhn. 1990. Detection of antigens with an affinity for host cell membrane polypeptides in culture supernatants of *Trypanosoma cruzi*. Infect. Immun. 58(6): 1812-1816.

Dimock*, K.A., C.D. Davis, and R.E. Kuhn. 1991. Effect of elevated environmental temperature on the antibody response of mice infected with *Trypanosoma cruzi*. Infect. Immun. 59(12): 4377-4382.

Karsten*, V., C.D. Davis, and R.E. Kuhn. 1992. *Trypanosoma cruzi* in reservoir hosts in North Carolina. Journal of Parasitol. 78(3): 547-549.

Dimock*, K.A., C.D. Davis, and R.E. Kuhn. 1992. Changes in the humoral response to *Trypanosoma cruzi* in mice held at elevated environmental temperature. Journal of Parasitol. 78(4): 87-696.

Davis, C.D., L. Brooks*, C. Calisi*, B. J. Bennett*, and D. M. McElroy. 1998. Beneficial effect of selenium supplementation during murine infection with *Trypanosoma cruzi*. Journal of Parasitol. 84(6): 1274-1277.

Arif*, A, L. Gao*, C.D. Davis and D. Helm*. 1999. Antibody response to heat shock proteins of *Trypanosoma cruzi* and histopathology in mice maintained at elevated environmental temperature. Journal of Parasitol. 85(6): 1089-1099.

McCarthy*, S.M., and C.D. Davis. 2003. Pro-oxidant diet provides protection against murine toxoplasmosis. Journal of Parasitol. 89(5): 886-894. PubMed PMID: 14627133.

Ming*, Z. and C.D. Davis. 2003. CD8+ T lymphocytes required for enhanced survival of *Trypanosoma cruzi*-infected mice at elevated environmental temperature. Journal of Parasitol. 89(3): 630-632. PubMed PMID: 12880274.

Blizzard*, E.L., C.D. Davis, S. Henke, D.B. Long, and M.J. Yabsley. 2010. Distribution, prevalence, and genetic characterization of *Baylisascaris procyonis* in selected areas of Georgia. Journal of Parasitol. 96(6): 1128-1133. PubMed PMID:21158622.

Pile*, J.E., Navalta JW, Davis C.D., Sharma NC. 2013. Interventional effects of plumbagin on experimental ulcerative colitis in mice. Journal of Natural Products. 76(6):1001-6. doi: 10.1021/np3008792. Epub 2013 Jun 6. PubMed PMID: 23742275; PubMed Central PMCID: PMC3752897.

Miller* J, and Davis C.D. 2013. Increasing frequency of feline cytauxzoonosis cases diagnosed in western Kentucky from 2001 to 2011. Veterinary Parasitology 198(1-2):205-8. doi: 10.1016/j.vetpar.2013.08.012. Epub 2013 Aug 21. PubMed PMID: 24035030; PubMed Central PMCID: PMC3836630.

Russell, E., Bosserman, E., Marshall, R., Davis, S., Beaudoin, A., Handali, S., McAuliffe, I., Davis, C. and Woodhall, D. 2014. Prevalence of *Strongyloides stercoralis* antibodies among a rural Appalachian Population – Kentucky, 2013. The American Journal of Tropical Medicine and Hygiene 91(5):1000-1001. Epub 2014 Aug 25. PubMed PMID: 25157122. PubMed Central PMCID: PMC4228864.

Vandermark, C., Zieman, E., Boyles, E., Nielsen, C., Davis, C., and Jimenez-Ruiz, Francisco. 2018. *Trypanosoma cruzi* strain TCIV infects raccoons from Illinois. Memorias do Instituto Oswaldo Cruz. 113(1):30-37. PMID: 29211106

Buchholz*, M.J., C.D. Davis, N.S. Rowland, and C.W. Dick. *Borrelia burgdorferi* in small mammal reservoirs in Kentucky, a traditionally non-endemic state for Lyme Disease. Ticks and Tick-borne Diseases (*in review*)

PUBLICATIONS (Education):

Davis, C.D. and N.A. Rice. 2008. Another can of bull: Do energy drinks really provide a source of energy? (Clicker Case Study). National Center for Case Study Teaching in Science http://www.sciencecases.org/energy_drinks_clicker/prelude.asp.

PUBLICATIONS (Abstracts):

Bi*, L., C. Groce*, and C. Davis. 2010. Molecular analysis of *Trypanosoma cruzi* isolates obtained from raccoons in Warren and Barren counties of Kentucky. BioMed Central Bioinformatics. 11(Suppl 4): P3.

Pawar*, S., C.D. Davis, C.A. Rinehart. 2011. Statistical analysis of microarray gene expression data from a mouse model of toxoplasmosis. BioMed Central Bioinformatics. 12 (Suppl 7): A19

PRESENTED PAPERS (since 2005):

L.J. Watson and C.D. Davis. 2005. Increased synthesis of immuno-regulatory cytokines in *Toxoplasma gondii* -infected mice maintained on an antioxidant diet. Sigma Xi Student Research Conference, Western Kentucky University.

First Place in Undergraduate Research Competition – Biology

First Place in Undergraduate Research Competition – Best of Conference

C.D. Davis. 2005. Does host diet influence the outcome of parasitic infection? 32nd Annual Fancy Gap Immuno-parasitology Workshop (Invited Participant), Fancy Gap, Virginia, October 2005.

C. Cantrell and C.D. Davis. 2005. *Baylisascaris procyonis* in Allegheny Woodrats (*Neotoma magister*) within the Upper Green River Biological Preserve. 32nd Annual Fancy Gap Immuno-parasitology Workshop (Invited Participant), Fancy Gap, Virginia, October 2005.

J. Sahi, A. McDowell, C. Davis, and J. Bilotta. 2005. Optic nerve regeneration in the adult zebrafish: a physiological and anatomical investigation. Annual Meeting of the Kentucky Academy of Science, Eastern Kentucky University, Richmond, KY.

H. Johnson, N. Rice, and C. D. Davis. 2005. Correlation between a biology attitude survey and content pre-assessment in an introductory course for majors. Annual Meeting of the Kentucky Academy of Science, Eastern Kentucky University, Richmond, KY.

C.D. Davis. 2005. Does host diet influence the outcome of parasitic infection? Annual Meeting of the Kentucky Academy of Science, Eastern Kentucky University, Richmond, KY.

Y. Zhou and C.D. Davis. 2006. Analysis of gene expression in mouse brains during *Toxoplasma gondii* infection. Beta Beta Beta Southeastern Region District Convention, Gatlinburg, TN, March 29- April 1, 2006.

Second Place - Brooks Award Competition for Best Paper

L. Kullman and C.D. Davis. 2006. Diet affects immunologically relevant gene expression in brains of infected mice. Beta Beta Beta Southeastern Region District Convention, Gatlinburg, TN, March 29- April 1, 2006.

L. Kullman and C.D. Davis. 2006. Diet affects immunologically relevant gene expression in brains of infected mice. Sigma Xi Student Research Conference, Bowling Green, KY, April 8, 2006.

Second Place – Undergraduate Research Presentation.

Y. Zhou and C.D. Davis. 2006. Analysis of gene expression in mouse brains during *Toxoplasma gondii* infection. Sigma Xi Student Research Conference, Bowling Green, KY, April 8, 2006.

Third Place – Undergraduate Research Presentation.

R. Shryock, Y. Zhou, and C. D. Davis. 2006. The effect of diet in C57Bl6/J mice infected with the human pathogen, *Toxoplasma gondii*. Sigma Xi Student Research Conference, Bowling Green, KY, April 18, 2006.

C.D. Davis, A. Khalyfa, Y. Zhou, R. Shryock, and N.G.F. Cooper. 2006. Microarray analysis reveals intense inflammatory response in the brains of antioxidant supplemented mice infected with *Toxoplasma gondii*. UT-ORNL-KBRIN Bioinformatics Summit, Lake Barkley State Resort Park, Cadiz, KY. April 21-23, 2006.

C.D. Davis, A. Khalyfa, Y. Zhou, R. Shryock, L. Kullman, and N.G.F. Cooper. 2006. Microarray Analysis Reveals Intense Inflammatory Response in Brains of Antioxidant Supplemented Mice Infected With *Toxoplasma gondii*. 1st Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE). Washington D.C.

C.D. Davis, A. Khalyfa, Y. Zhou, R. Shryock, and N.G.F. Cooper. 2006. Microarray analysis reveals intense inflammatory response in the brains of antioxidant supplemented mice infected with *Toxoplasma gondii*. International Congress of Parasitology (ICOPA XI, Glasgow Scotland, August 6-11.

Petluru, V. and C.D. Davis. 2007. Effect of antioxidant supplementation on the production of nitric oxide and inducible nitric oxide synthase in a murine model of toxoplasmosis. Annual Meeting of the Southeastern Society of Parasitologists, April 11-13, 2007.

Barahona, N. and C.D. Davis. 2007. Quantum dot immuno-conjugates allow for reliable, photostable detection of intracellular stages of *Toxoplasma gondii*. Annual Meeting of the Southeastern Society of Parasitologists, April 11-13, 2007.

Zhou, Y., S. Carraro, and C.D. Davis. 2007. Antioxidant supplementation stimulates intense inflammatory response in the brains of mice infected with *Toxoplasma gondii*. Annual Meeting of the Southeastern Society of Parasitologists, April 11-13, 2007.

Manning, P.R., N. Barahona, and C.D. Davis. 2007. Intense, specific, and stable labeling

of intracellular stages of *Toxoplasma gondii* using quantum dot immuno-conjugates. Annual Meeting of the Kentucky Academy of Sciences, Louisville, KY, November 2007.

Groce, B.C. and C.D. Davis. 2007. *Trypanosoma cruzi* isolated from raccoons trapped in Kentucky. Annual Meeting of the Kentucky Academy of Sciences, Louisville, KY, November 2007.

Mavi, A., B.C. Groce, and C.D. Davis. 2008. *Baylisascaris procyonis* infection in raccoons trapped from Warren and Barren Counties of Kentucky. 38th Annual WKU Student Research Conference. ***Honorable Mention Undergraduate poster presentation.***

Tackett, K., M. Bowling, B.C. Groce, and C.D. Davis. 2008. Raccoons and opossums as potential reservoir hosts for tick-borne zoonoses in Kentucky. 38th Annual WKU Student Research Conference.

Groce, C. and C.D. Davis. 2008. First report of the sylvatic cycle of *Trypanosoma cruzi* in Kentucky. 38th Annual WKU Student Research Conference.

Groce, C. and C.D. Davis. 2008. *Trypanosoma cruzi* isolated from raccoons trapped in Kentucky. Association of Southeastern Biologists/Southeastern Society of Parasitologists, 2008 Annual Meeting. April 16-19, 2008, Spartanburg, SC.

Tackett, K., M. Bowling, C. Groce, and C.D. Davis. 2008. Raccoons and opossums as potential reservoir hosts for tick-borne zoonoses in Kentucky. Association of Southeastern Biologists/Southeastern Society of Parasitologists, 2008 Annual Meeting. April 16-19, 2008, Spartanburg, SC.

Groce, C. and C.D. Davis. 2008. First report of *Trypanosoma cruzi* infection in raccoons and opossums from Kentucky. Annual International Conference of the Wildlife Disease Association. August 2008, Edmonton, Alberta (Canada).

Walker, C., T.C. Holaday, and C.D. Davis. 2008. High prevalence of raccoon roundworm (*Baylisascaris procyonis*) in South Central Kentucky. Annual Meeting of the Kentucky Academy of Sciences, Lexington, KY, November 2008.

Third Place in Undergraduate Research Competition in Zoology (Poster Session)

Tackett, K., B.C. Groce, and C.D. Davis. 2008. Raccoons and opossums as potential reservoir hosts for tick-borne zoonoses in Kentucky. Annual Meeting of the Kentucky Academy of Sciences, Lexington, KY, November 2008.

First Place Graduate Research Competition in Microbiology

Gentry, K., C. Gavin, B.C. Groce, and C.D. Davis. 2008. Annual Meeting of the Kentucky Academy of Sciences, Lexington, KY, November 2008.

First Place in Undergraduate Research Competition in Microbiology

Tackett, K., J. Padgett, C. Groce, and C.D. Davis. 2009. Prevalence and diversity of ticks isolated from raccoons and opossums trapped in South Central Kentucky. Annual Meeting of the Southeastern Society of Parasitologists. April 15-17, 2009. Murray, KY.

Groce, C., C. Walker, T.C. Holaday, and C.D. Davis. *Baylisascaris procyonis* in raccoons trapped in South Central Kentucky. Annual Meeting of the Southeastern Society of Parasitologists, April 15-17, 2009, Murray, KY.

Bi, L., C. Groce, S. Varikuti, and C.D. Davis. Molecular analysis of *Trypanosoma cruzi* isolates obtained from raccoons in South Central Kentucky. Annual Meeting of the Southeastern Society of Parasitologists, April 15-17, 2009. Murray, KY.

Blizzard, E., C.D. Davis, S. Henke, D.B. Long, and M.J. Yabsley. Prevalence and genetic characterization of *Baylisascaris procyonis* from raccoons from Georgia. Annual Meeting of the Southeastern Society of Parasitologists, April 15-17, 2009. Murray, KY.

Bi, L., S. Varikuti, C. Groce, and C.D. Davis. Molecular analysis of *Trypanosoma cruzi* isolates obtained from raccoons trapped in South Central Kentucky. Annual Meeting of the American Society of Parasitologists, August 14-17, 2009. Knoxville, TN.

C.D. Davis, C. Groce, T. Holaday, and C. Walker. High Prevalence of *Baylisascaris procyonis* in raccoons trapped in south central Kentucky. Annual Meeting of the American Society of Parasitologists, August 14-17, 2009. Knoxville, TN.

C. Groce and C.D. Davis. *Trypanosoma cruzi* in wild raccoons and opossums from Kentucky. Annual Meeting of the American Society of Parasitologists, August 14-17, 2009. Knoxville, TN.

Bi, L., C. Groce, and C. Davis. Molecular analysis of *Trypanosoma cruzi* isolates obtained from raccoons in Warren and Barren counties of Kentucky. UT-ORNL-KBRIN Bioinformatics Summit. March 19-21, 2010. Lake Barkley State Resort Park, Cadiz, KY.

Blizzard, E., C.D. Davis, S. Henke, D. B. Long, M. Beck, and M. Yabsley. Distribution, prevalence and genetic characterization of *Baylisascaris procyonis* from selected regions of Georgia and Florida. Annual Meeting of the Southeastern Society of Parasitologists. April 7-9, 2010. Western Carolina University, Asheville, NC.

Tackett, K. and C.D. Davis. High prevalence of *Borrelia burgdorferi* in ticks recovered from raccoons and opossums trapped in Kentucky. Annual Meeting of the American Society of Parasitologists. June 22-25, 2010. Colorado Springs, CO.

Pawar, S., C. Rinehart, and C.D. Davis. Statistical analysis of microarray gene expression data in a mouse model of toxoplasmosis. Annual Meeting of the Kentucky Academy of Sciences. November 12-13, 2010. Western Kentucky University, Bowling Green, KY.

Onwu, C., A.J. Johnson, and C.D. Davis. Preliminary survey of tick vectors of human ehrlichiosis, Rocky Mountain spotted fever, and Lyme disease in Warren County, Kentucky. Annual Meeting of the Kentucky Academy of Sciences. November 12-13, 2010. Western Kentucky University, Bowling Green, KY.

Johnson, A.J., N. Rowland, and C.D. Davis. PCR-based detection of *Rickettsia* spp. In ticks collected in Warren County, Kentucky. Annual Meeting of the Kentucky Academy of Sciences. November 12-13, 2010. Western Kentucky University, Bowling Green, KY.
Second Place in Undergraduate Research Competition (Oral Presentation)

Moss, C., B.C. Groce, and C.D. Davis. PCR amplification of *Trypanosoma cruzi*-specific DNA from Raccoon Blood Samples. Annual Meeting of the Kentucky Academy of Sciences. November 12-13, 2010. Western Kentucky University, Bowling Green, KY.
Second Place in Undergraduate Research Competition (Poster Presentation)

Onwu, C., A.J. Johnson, and C.D. Davis. Preliminary survey of tick vectors of human ehrlichiosis, Rocky Mountain spotted fever, and Lyme disease in Warren County, Kentucky. WKU Student Research Conference. March 26, 2011. Western Kentucky University, Bowling Green, KY.

Onwu, C. T. Beeler, A. Emmert, and C.D. Davis. 2011. Seroprevalence of tick borne infections and associated tick vectors in Kentucky Canines. Kentucky-West Virginia Louis-Stoke Alliance for Minority Participant Research. October 6, 2011. Morgantown, West Virginia.

Pawar, S., C.A. Rinehart, and C.D. Davis. Statistical analysis of microarray gene expression data from a mouse model of toxoplasmosis. Annual Meeting of the Kentucky Academy of Sciences. November 4-5, 2011. Murray State University, Murray, KY.

Beeler, T.W., A.R. Emmert, D. Reed, and C.D. Davis. Seroprevalence of *Trypanosoma cruzi* and other vector-borne pathogens in canines from western and central Kentucky. Annual Meeting of the Kentucky Academy of Sciences. November 4-5, 2011. Murray State University, Murray, KY.

First Place in Undergraduate Research Competition (Poster Presentation)

Emmert, A.R., T.W. Beeler, C. Onwu, D. Reed, and C.D. Davis. Serological assessment of vector-borne disease risk in Kentucky canines. Annual Meeting of the Southeastern Society of Parasitologists. March 21-23, 2012. Pine Mountain State Resort Park, Pineville, KY.

Beeler, T.W., A.R. Emmert, D. Reed, and C.D. Davis. Seroprevalence of *Trypanosoma cruzi* in dogs from western and central Kentucky. March 21-23, 2012. Pine Mountain State Resort Park, Pineville, KY.

Davis, C.D., T.W. Beeler, A.R. Emmert, J. Miller, and D. Reed. Dogs as Sentinels of Vector-Borne Disease Risk in Kentucky. NIH, NIGMS Fourth Biennial National IDeA Symposium of Biomedical Research Excellence. Washington, D.C., June 25-27, 2012.

Davis, C.D. Kentucky soil-transmitted helminth survey. 40th Fancy Gap Immunoparasitology Workshop. Fancy Gap, Virginia, October 2013. *Invited Presentation*.

Bosse, L., A. Gingerich, N. Rowland, J. Miller, D. Reed, and C.D. Davis. Seroprevalence of *Trypanosoma cruzi* and other vector-borne pathogens in Kentucky Canines. Annual Meeting of the Kentucky Academy of Sciences. November 8-9, 2013. Morehead State University, Morehead, KY.

Pittman, K., B. Wielgus, C. Dick, and C.D. Davis. Prevalence of *Baylisascaris procyonis* in raccoons (*Procyon lotor*) in Kentucky. Annual Meeting of the Kentucky Academy of Science. November 8-9, 2013. Morehead State University, Morehead, KY.
Second Place in Graduate Research Competition in Zoology (Paper Session)

Davis, C.D. Forgotten but not gone: human helminth infection in the United States. Annual Meeting of the Southeastern Society of Parasitologists. April 9-11, 2014. Georgia Southern University, Statesboro, Georgia.

Davis, C.D., L. Bosse, and K. Wickizer. Seroprevalence of vector-borne pathogens in Kentucky canines. NIH, NIGMS Fifth Biennial National IDeA Symposium of Biomedical Research Excellence. Washington, D.C., June 16-18, 2014.

Davis, C.D. Human helminth infection in Kentucky. 41st Fancy Gap Immunoparasitology Workshop. Fancy Gap, Virginia, October 2014. *Invited Presentation*.

Cox, K., A. Smith, and C.D. Davis. Seroprevalence of Vector-Borne Disease Pathogens in Canines from Central and Eastern Kentucky. 100th Annual Meeting of the Kentucky Academy of Science. Lexington, Kentucky, November 14-16, 2014.

Cox, K., A. Smith, and C.D. Davis. Serologic surveillance for canine Chagas disease in Central and Eastern Kentucky. Annual Meeting of the Southeastern Society of Parasitologists. April 9-11, 2015. Virginia Tech, Blacksburg, Virginia.

Davis, C.D., S.M. Jones, E. Main, D. Garrett-Wright, T. Holaday, and S. House. Ascariasis and enterobiasis in a rural Kentucky farming community. Annual Meeting of the Southeastern Society of Parasitologists. April 9-11, 2015. Virginia Tech, Blacksburg, Virginia.

Wielgus, K.M., B.J. Wielgus, C. Dick, and C.D. Davis. Compared prevalence of *Baylisascaris procyonis* in raccoons (*Procyon lotor*) in Kentucky. Annual Meeting of the American Society of Parasitologists, Omaha, Nebraska, June 24-June 29, 2015.

SEMINARS / SYMPOSIA

Chair of Presidential Symposium: *Perspectives in Parasitology*

December 2017

Annual Meeting of the Southeastern Society of Parasitologists, May 2001, Berry College, Rome, Georgia.

Impact of Antioxidant Supplementation During Parasitic Infection: Beneficial or Harmful? Departmental Seminar, Murray State University, Murray, KY. 2003

Does Host Diet Influence Parasitic Infection. Departmental Seminar, University of Southern Indiana, Evansville, IN. 2004

Chair of Immunology Paper Session. North American Congress of Parasitology, Merida, Mexico. June 21-25, 2007.

Climate Change and Infectious Disease. The Conversation on Global Warming, Western Kentucky University. January 31, 2008.

Anatomy of NIH R15 Proposal. NIH R15 Workshop, Annual Meeting of the Kentucky Academy of Sciences, Northern Kentucky University, November 13, 2009.

Anatomy of NIH R15 Proposal. NIH R15 Workshop, Annual Meeting of the Kentucky Academy of Sciences, November 12, 2010. Western Kentucky University, Bowling Green, KY.

Anatomy of NIH R15 Proposal. NIH R15 Workshop, Annual Meeting of the Kentucky Academy of Sciences, November 4, 2011. Murray State University, Murray, KY.

The Bad Guys: Parasites as Pathogens. Invited Speaker. Annual Meeting of the Southeastern Society of Parasitologists (Presidential Symposium). Helen, Georgia, April 6, 2011.

Dogs as Sentinels of Vector-Borne Disease Risk in Kentucky. Invited Seminar Speaker. Department of Biology, College of Charleston. February 21, 2012.