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Manhattan, KS 66502
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Education:

1976-1980 B.S., Animal Science, Rutgers University, Cook College, New Brunswick, NJ.
1983-1987 V.M.D., Univ. of Pennsylvania, School of Veterinary Medicine, Philadelphia, PA.
1991-1994 Ph.D., Comparative Medicine, Biomedical Graduate Group, University of PA, Philadelphia.
Dissertation Title - A vaccinia recombinant virus: comparative evaluations among free-ranging, immunocompetent, and immunodeficient hosts.

Professional Experience/Appointments:

Jun '07-present Director, Rabies Laboratory, Kansas State University, Manhattan, KS
Supervisor: Dr. Gary Anderson
2000-Jun '07 Veterinary Medical Officer, CDC, Rabies Section, Atlanta, GA
Supervisor: Dr. Charles E. Rupprecht 404-639-1050
Short-term Detail: CDC Liaison assigned to the World Organization for Animal Health
(Organization International des Epizooties, OIE), Paris, France. Sep – Dec 2006.
1998-2000 Senior Staff Fellow, CDC, Rabies Section, Atlanta, GA
Supervisor: Dr. Charles E. Rupprecht 404-639-1050
1996-1998 Visiting Researcher (ORISE), CDC, Rabies Section, Atlanta, GA
Supervisor: Dr. Charles E. Rupprecht 404-639-1050
1994-1996 Deputy/Acting State Public Health Vet, NYSDOH, Albany, NY
Supervisor: Dr. John G. Debbie (retired); Dr. Guthrie Burkhead
1992-1994 Research Instructor, Dept of Microbiology and Immunology,
Thomas Jefferson University, Centre for Neurovirology, Phila, PA
Supervisor: Dr. Hilary Koprowski and Charles E. Rupprecht.
1987-1992 Veterinarian Associate, Rabies Unit, The Wistar Institute, Phila., PA
1985-1987 Research Assistant, Rabies Unit, The Wistar Institute, Phila., PA
1984-1985 Work Study, Dept of Epidemiology, School of Vet Med, Phila., PA
1984-1984 NIH Research Fellow, School of Veterinary Medicine, Phila., PA

Specialty Certification:

American College of Veterinary Preventive Medicine (ACVPM), Diplomat, July 2005.

Licensure :

Pennsylvania (eligible for activation)

Awards, honors and membership in Honorary Societies:

- Charles Shephard Science Award, Assessment and Epidemiology, National Center for Zoonotic, Vector-borne and Enteric Diseases, Jun 2007.
- CDC, National Center for Infectious Diseases, Honor Award Certificate for Public Health Protection Research, Aug 2005.
- USDA, Certificate of Appreciation, Rabies Surveillance in WV, 2002.
- National Outstanding Veterinary Student Public Health Award, 1987.
- Member, Phi Zeta, The Honor Society of Veterinary Medicine, 1987.
- NIH Research Fellow, 1984.
- American Society of Animal Science Scholarship, 1980.

Membership in Professional Societies:

American Association of Food Hygiene Veterinarians (AAFHV, 1985-)
American Association of Public Health Veterinarians (AAPHV, 1983-)
American Association of Veterinary Laboratory Diagnosticians (AAVLD, 2007-)
American Association of Wildlife Veterinarians (AAWV, 1981-)
American College of Veterinary Public Health (ACVPM, 2005-)
American Public Health Association (APHA, 2007-)
American Veterinary Medical Association (AVMA, 1983-)
Association of State and Territorial Health Organizations (ASTHO, 2007-)
Kansas Veterinary Medical Association (KVMA, 2007-)
National Animal Control Association (NACA, 2007-)
National Association of City and County Health Organization (NACCHO, 2007-)
National Association of State and Public Health Veterinarians (NASPHV, 1992-)
Pennsylvania Veterinary Medical Association (PVMA, 2008 -)
Phi Zeta, The Honor Society of Veterinary Medicine (1987-)
United States Animal Health Association (USAHA), Rabies Committee (1985-)
Wildlife Diseases Association (WDA, 1981-)

Scientific Journal Referee:

Journal of the American Veterinary Medical Association
Clinical Infectious Diseases
Emerging Infectious Diseases
Journal of Wildlife Diseases
Vaccine
Virus Research

Teaching/Academic and Institutional Committees

Kansas State University College of Veterinary Medicine

Teaching/Supervising

Veterinary Orientation - Guest Lecturer
Veterinary Immunology – Guest Lecturer
Veterinary Virology – Guest Lecturer

Centers for Disease Control and Prevention

Teaching/Supervising

Senior Veterinary Student Intern – Brent Moore (Jun-Jul 2005)
Kansas State summer externship – Joanna Fishback (Jun-Aug 2005)
Senior Veterinary Student Intern – Nicolas Moraites (Oct-Nov 2004)
NIH Summer Fellow – Anastasia Meadows (Summer 2004)
Senior Veterinary Student Intern - Kathryn Herbst (Feb - Mar, 2004)

Emerging Infectious Diseases Fellow - Ann Schmitz, DVM (Sep 2003 - Sep 2005)
Senior Veterinary Student Intern - Rose Sydlowski (Sep - Oct, 2003)
Senior Veterinary Student Intern - John Dunn (Mar - May, 2003)
Emory University, Work Study, MPH - Scott Grytdal (Jan - Sep 2003)
Field Advisor, Master of Public Health Emory Univ – Jesse Blanton (Feb 02-May 03)
Senior Veterinary Student Intern - Danielle Stedman (Oct - Nov, 2002)
Externship, Mercer School of Medicine - Tony Philips (May-July, 2002)
Field Advisor, Master of Public Health Emory Univ - Angelika Wahner (Feb 02-May 03)
Senior Veterinary Student Intern - Ann Schmitz (Apr-May, 2002)
Senior Veterinary Student Intern - Jon Epstein (Mar-Apr, 2002)
Senior Veterinary Student Intern - Krista Martin (Feb-Mar, 2002)
Senior Veterinary Student Intern - Aspen Hammond (Jan - Feb, 2002)
Senior Veterinary Student Intern - Nadine Bowden (Jan - Feb, 2002)
Field Advisor, Master of Public Health, Emory Univ-Stephen Onufrak (Sep 01 - Dec 02)
Senior Veterinary Student Intern - Sarah Stetson (June-Aug, 2001)
Senior Veterinary Student Intern - Michael Van De Griend (June-Aug, 2001)
Project IMHOTEP, MHPF - Wade Ivy, III (June-Aug, 2001)
Ferguson Fellow, MHPF - Courtney Jackson (June-July, 2001)
Master of Public Health Practicum - Christy Holland (May-Aug, 2001)
Senior Veterinary Student Intern - Melissa Resnick (Jan-Mar, 2001)
Senior Veterinary Student Intern - Renee Funk (Jan-Feb, 2001)
Senior Veterinary Student Intern - Sylvia Crone (Oct-Nov, 2000)
Senior Veterinary Student Intern - Amy Nelson (May-June, 2000)
Senior Veterinary Student Intern - Cynthia Tate (Jan-Feb, 2000)
Senior Veterinary Student Intern - Jeanine Peters (Oct-Nov, 1999)
Senior Veterinary Student Intern - Bernadette Steele (April-May, 1999)
Field Advisor, Master of Public Health Emory student- Jane Larson (1997-98)
Field Advisor, Master of Public Health Emory student- Heidi Shoemake (1996-97)

New York State Department of Health

Teaching

Epidemiology 500- Rabies lecture

Academic Committee of Dr. Jeffrey Wyatt; MPH candidate (completed 5/95) Title: The Epidemiology of Human Post-Exposure Treatment in Upstate NY

Committees

Interdepartmental Rabies Committee, April 1994-Sep 1996.

Task Force on Wildlife Rabies Vaccination, April 1994-Sep 1996.

Institutional Animal Care and Use Committee, March 1995-Sep 1996.

Thomas Jefferson Medical College

Teaching

Microbiology 504-Virology section-Anti-viral agents and Immunotherapy lecture.

Microbiology 600-Virology section-Antigen Expression Systems lecture.

Graduate Committee Member, microbiology masters student Marisa Fiorella. Independent Study/Externship in the Neurovirology Laboratory - Supervised three senior college students for a semester-long externship.

Committees

Institutional Animal Care and Use Committee, April 1993-March 1994.

Epidemiologic Field Investigations/Invited Consultant:

-- National Advisory Board of HyperImmune Products, Irving, TX, USA. Feb 28, 2009.

-- World Health Organization, Meeting of the Immunization Strategic Advisory Group of Experts, 6-9

- November 2007. Invited Presenter on human rabies vaccines.
- Short-term Detail: CDC Liaison assigned to the World Organization for Animal Health (Organization International des Epizooties, OIE), Paris, France. Sep – Dec 2006.
 - World Organization for Animal Health (Office International Des Epizooties (OIE). Ad Hoc Workgroup Dog Population Control. Paris, France. Nov 1-6, 2006.
 - World Health Organization and Sri Lankan Ministry of Health. Rabies in dogs - study team. Nov 6-12, 2005.
 - CDC Epidemiologic Investigation – Aid, Field Investigation Team Leader, First human rabies case in 2005, Jackson, MS. September, 2005.
 - Secretary of Health State of Ceara, Brazil. Invited instructor: Wildlife Rabies Surveillance in Brazil, August, 2005.
 - CDC Epidemiologic Investigation – Aid, Field Investigation, Human rabies cases due to organ transplantation from an undiagnosed donor. Texarkana, Arkansas and Dallas, TX. August, 2004.
 - Pan American Health Organization, Field Investigation and Training for an outbreak of rabies among nonhuman primates in the state of Ceara, Brazil, June, 2003.
 - Pan American Health Association, Rabies Risk Assessment for the Bahamas, March, 2000.
 - Centers for Disease Control and Prevention, Working Group on Rabies Education and Human Rabies Prevention, March 1995.
 - USDA, National Research Initiative Competitive Grants Program (NRICPG), invited by the "Sustaining Animal Health and Well-being" panel to review grant applications, as of October, 1995.
 - World Health Organization, 3rd 4th and 5th Consultations of the Oral Immunization of Free-Ranging Dogs against Rabies, June 1992, 1993, 1994.

Bibliography

Selected Publications, peer reviewed

2008

Henderson JC, Biek R, Hanlon CA, O'Dee S, Real LA. Rabies virus in raccoons, Ohio, 2004. Emerg Infect Dis. 2008 Apr;14(4):650-2.

Manning SE, Rupprecht CE, Fishbein D, Hanlon CA, Lumlertdacha B, Guerra M, Meltzer MI, Dhankhar P, Vaidya SA, Jenkins SR, Sun B, Hull HF; Advisory Committee on Immunization Practices Centers for Disease Control and Prevention (CDC). Human rabies prevention--United States, 2008: recommendations of the Advisory Committee on Immunization Practices. MMWR Recomm Rep. 2008 May 23;57(RR-3):1-28.

Briggs D, Hanlon CA. World Rabies Day: focusing attention on a neglected disease. Vet Rec. 2007 Sep 1;161(9):288-9.

Castrodale L, Walker V, Baldwin J, Hofmann J, Hanlon C. Rabies in a puppy imported from India to the USA, March 2007. Zoonoses Public Health. 2008 Oct;55(8-10):427-30.

2007

Sloan SE, Hanlon C, Weldon W, Niezgoda M, Blanton J, Self J, Rowley KJ, Mandell RB, Babcock GJ, Thomas WD, Rupprecht CE, Ambrosino DM. Identification and characterization of a human monoclonal antibody that potentially neutralizes a broad panel of rabies virus isolates. Vaccine. 2007 Apr 12;25(15):2800-10. Epub 2006 Dec 29.

Blanton JD, Hanlon CA, Rupprecht CE. Rabies surveillance in the United States during 2006. J Am Vet Med Assoc. 2007 Aug 15.

2006

Blanton JD, Krebs JW, Hanlon CA, Rupprecht CE. Rabies surveillance in the United States during 2005. *J Am Vet Med Assoc*. 2006 Dec 15;229(12):1897-911.

Blanton JD, Manangan A, Manangan J, Hanlon CA, Slate D, Rupprecht CE. Development of a GIS-based, real-time Internet mapping tool for rabies surveillance. *Int J Health Geogr*. 2006 Nov 1;5:47.

Leslie MJ, Messenger S, Rohde RE, Smith J, Cheshier R, Hanlon C, Rupprecht CE. Bat-associated rabies virus in Skunks. *Emerging Infect. Dis*. 2006 Aug;12(8):1274-7.

Rupprecht CE, Hanlon CA, Slate D. Control and prevention of rabies in animals: paradigm shifts. *Dev Biol (Basel)*. 2006;125:103-11. Review.

Blanton JD, Meadows A, Murphy SM, Manangan J, Hanlon CA, Faber ML, Dietzschold B, Rupprecht CE. Vaccination of small Asian mongoose (*Herpestes javanicus*) against rabies. *J. Wildl. Dis*. 2006 Jul;42(3):663-6.

Goudsmit J, Marissen WE, Weldon WC, Niezgodka M, Hanlon CA, Rice AB, Kruif J, Dietzschold B, Bakker AB, Rupprecht CE. Comparison of an anti-rabies human monoclonal antibody combination with human polyclonal anti-rabies immune globulin. *J Infect Dis*. 2006 Mar 15;193(6):796-801. Epub 2006 Feb 6.

Lodmell DL, Ewalt LC, Parnell MJ, Rupprecht CE, Hanlon CA. One-time intradermal DNA vaccination in ear pinnae one year prior to infection protects dogs against rabies virus. *Vaccine*. 2006 Jan 23;24(4):412-6. Epub 2005 Aug 15.

2005

Blanton JD, Bowden NY, Eidson M, Wyatt JD, Hanlon CA. Rabies postexposure prophylaxis, New York, 1995–2000. *Emerg Infect Dis* [serial on the Internet]. 2005 Dec. Available from <http://www.cdc.gov/ncidod/EID/vol11no12/04-1278.htm>

Hanlon CA, Kuzmin IV, Blanton JD, Weldon WC, Manangan JS, Rupprecht CE. Efficacy of rabies biologics against new lyssaviruses from Eurasia. *Virus Res*. 2005 Jul;111(1):44-54. Epub 2005 Apr 26.

Rupprecht CE, Hanlon CA, Blanton J, Manangan J, Morrill P, Murphy S, Niezgodka M, Orciari LA, Schumacher CL, Dietzschold B. Oral vaccination of dogs with recombinant rabies virus vaccines. *Virus Res*. 2005 Jul;111(1):101-5. Epub 2005 Apr 8.

Srinivasan A, Burton EC, Kuehnert MJ, Rupprecht C, Sutker WL, Ksiazek TG, Paddock CD, Guarner J, Shieh WJ, Goldsmith C, Hanlon CA, Zoretic J, Fischbach B, Niezgodka M, El-Feky WH, Orciari L, Sanchez EQ, Likos A, Klintmalm GB, Cardo D, LeDuc J, Chamberland ME, Jernigan DB, Zaki SR; Rabies in Transplant Recipients Investigation Team. Transmission of rabies virus from an organ donor to four transplant recipients. *N Engl J Med*. 2005 Mar 17;352(11):1103-11.

2004

Hughes GJ, Smith JS, Hanlon CA, Rupprecht CE. Evaluation of a TaqMan PCR assay to detect rabies virus RNA: influence of sequence variation and application to quantification of viral loads. *J Clin Microbiol*. 2004 Jan;42(1):299-306.

Rupprecht CE, Hanlon CA, Slate D. Oral vaccination of wildlife against rabies: opportunities and challenges in prevention and control. *Dev Biol (Basel)*. 2004;119:173-84. Review.

2003

Kuzmin IV, Orciari LA, Arai YT, Smith JS, Hanlon CA, Kameoka Y, Rupprecht CE. Bat lyssaviruses (Aravan and Khujand) from Central Asia: phylogenetic relationships according to N, P and G gene sequences. *Virus Res*. 2003 Nov;97(2):65-79.

Guerra MA, Curns AT, Rupprecht CE, Hanlon CA, Krebs JW, Childs JE. Skunk and raccoon rabies in the eastern United States: temporal and spatial analysis. *Emerg Infect Dis*. 2003 Sep;9(9):1143-50.

Nel LH, Niezgodka M, Hanlon CA, Morrill PA, Yager PA, Rupprecht CE. A comparison of DNA vaccines for the rabies-related virus, Mokola. *Vaccine*. 2003 Jun 2;21(19-20):2598-606.

2002

Hanlon, CA, M. Niezgodka, P. Morrill, C.E. Rupprecht. April 2002. Oral Efficacy of an attenuated rabies virus vaccine in skunks and raccoons. *J Wildl Dis*. 2002 Apr;38(2):420-7.

Lodmell DL, Parnell MJ, Bailey JR, Ewalt LC, Hanlon CA. Rabies DNA vaccination of non-human primates: post-exposure studies using gene gun methodology that accelerates induction of neutralizing antibody and enhances neutralizing antibody titers. *Vaccine*. 2002 May 22;20(17-18):2221-8.

Rupprecht CE, Hanlon CA, Hemachudha T. *Lancet Infect Dis*. Rabies re-examined. 2002 Jun;2(6):327-43.

Hanlon CA, Niezgodka M, Rupprecht CE. Postexposure prophylaxis for prevention of rabies in dogs. *Am J Vet Res*. 2002 Aug;63(8):1096-100.

2001

Lodmell, DL, Parnell, MJ, Bailey, JR, Ewalt, LC, and Hanlon, CA. One-time gene gun or intramuscular rabies DNA vaccination of nonhuman primates: comparison of neutralizing antibody responses and protection against rabies one year after vaccination. *Vaccine* 2001 Dec 12;20(5-6):838-44.

Hanlon, C.A., Niezgodka, M., Morrill, P., and Rupprecht, C.E. The incurable wound revisited progress in human rabies prevention? 2001. *Vaccine* 19:2273-9.

Hanlon, CA, DeMattos, CA, DeMattos, CC, Niezgodka, M, Hooper, DC, Koprowski, H, Notkins, A, and Rupprecht, CE. Experimental utility of rabies virus-neutralizing human monoclonal antibodies in post-exposure prophylaxis. 2001 *Vaccine* 19:3834-42.

Hamir AN, Hanlon CA, Niezgodka M, Rupprecht CE. The prevalence of interstitial nephritis and leptospirosis in 283 raccoons (*Procyon lotor*) from 5 different sites in the United States. *Can Vet J* 2001 Nov;42(11):869-71.

Orciari LA, Niezgodka M, Hanlon CA, Shaddock JH, Sanderlin DW, Yager PA, Rupprecht CE. Rapid clearance of SAG-2 rabies virus from dogs after oral vaccination. *Vaccine* 2001 Aug 14;19(31):4511-8.

Rupprecht CE, Blass L, Smith K, Orciari LA, Niezgodka M, Whitfield SG, Gibbons RV, Guerra M,

Hanlon CA. Human infection due to recombinant vaccinia-rabies glycoprotein virus. N Engl J Med 2001 Dec 13;345(24):1784

1999

Hanlon, C.A., J.E. Childs, V.F. Nettles. Special Series - Recommendations of a national working group on prevention and control of rabies in the United States: Rabies in wildlife. 1999. Journal of the American Veterinary Medical Association 215 (11): 1612-1618 (Dec 1, 1999).

Hanlon, C.A., J.S. Smith, G.R. Anderson and the members of the national working group. Special Series - Recommendations of a national working group on prevention and control of rabies in the United States: Laboratory diagnosis of rabies. 1999. Journal of the American Veterinary Medical Association 215(10): 1444-1446 (Nov 15, 1999).

Hanlon, C.A., J. G. Olson, C.J. Clark and the members of the national working group. Special Series - Recommendations of a national working group on prevention and control of rabies in the United States: Prevention and education regarding rabies in human beings. 1999. Journal of the American Veterinary Medical Association 215(9): 1276-1280 (Nov 1, 1999).

Wyatt, J.D., W.H. Barker, N.M. Bennett, and C.A. Hanlon. The epidemiology of human postexposure prophylaxis in four counties of New York during a raccoon epizootic, 1993 and 1994. 1999. Emerging Infectious Diseases 5(3): 415-423.

1998

Hanlon, C.A., M. Niezgoda, A.N. Hamir, C. Schumacher, H. Koprowski, and C.E. Rupprecht. 1998. First North American field release of a vaccinia-rabies glycoprotein recombinant virus. Journal of Wildlife Diseases 34(2): 228-239.

Rupprecht, C.E., J.S. Shaddock, D.W. Sanderlin, C.A. Hanlon, M. Niezgoda, and C.L. Schumacher. Oral rabies vaccination of dogs. Israel Journal of Veterinary Medicine 53(4): 127-131.

McGuill, M.W., S.M. Kreindel, A. DeMaria, A.H. Robbins, S. Rowell, C.A. Hanlon, and C.E. Rupprecht. Human contact with bait containing vaccine for control of rabies in wildlife. Journal of the American Veterinary Medical Association 213(10):1413-1417.

Lodmell, D.L., N.B. Ray, M.J. Parnell, L.C. Ewalt, C.A. Hanlon, J.H. Shaddock, D.S. Sanderlin, and C.E. Rupprecht. DNA immunization protects nonhuman primates against rabies virus. Nature Medicine. 4(8):949-52.

1997

Hanlon, C. A., M. Niezgoda, V. Shankar, H. S. Niu, , H. Koprowski, and C.E. Rupprecht. 1997. A recombinant vaccinia-rabies virus in the immunocompromised host: oral innocuity, progressive parenteral infection, and therapeutics. Vaccine 15:140-148.

1996

Muñoz, J. L., R. Wolff, A. Jain, J. Sabino, G. Jacquette, M. Rapoport, J. Lieberman, C. C. Baisley, B.H. Ward, C. R. Brown, P. M. Stolte, A. B. Crowley, H. Hastings, M. L. Carrter, J. L. Hadler, T. W. French, S. Kreindel, R. Knowlton, G. S. Birkhead, J. G. Debbie, C. A. Hanlon, C. V. Trimarchi, D. L. Morse, VRZB, DVRD, NCID; Division of Field Epidemiology, EPO, CDC. Human Rabies - Connecticut, 1995. Morbidity and Mortality Weekly Report 45:207-209. March 15, 1996.

Hamir, A. N., C. A. Hanlon, and C. E. Rupprecht. 1996. Endogenous lipid pneumonia (multifocal

- alveolar histiocytosis) in raccoons (Procyon lotor). *Journal of Veterinary Diagnostic Investigations* 8: 3-6.
- 1995**
- Hamir, A. N., G. Moser, A. B. Benson, J. P. Sundberg, C. A. Hanlon, and C. E. Rupprecht. 1995. Papillomavirus infection in raccoons (Procyon lotor). *Journal of Veterinary Diagnostic Investigations* 7: 549-551.
- 1994**
- Rupprecht, C. E., V. Shankar, C. A. Hanlon, A. Hamir, and H. Koprowski. 1994. Beyond Pasteur to 2001: Future Trends in Lyssavirus Research? Eds., C.E. Rupprecht, B. Dietzschold, and H. Koprowski. *Current Topics in Microbiology and Immunology* 187: 325-340.
- 1993**
- Rupprecht, C. E., C. A. Hanlon, M. Niezgodka, J. R. Buchanan, D. Diehl, and H. Koprowski. 1993. Recombinant rabies vaccines: Efficacy assessment in free-ranging animals. *Onderstepoort Journal of Veterinary Research* 60:463-468.
- Koprowski, H., Y. Mu Zheng, E. Heber-Katz, N. Fraser, L. Rorke, Z. Fang Fu, C. Hanlon, and B. Dietzschold. 1993. *In vivo* expression of inducible nitric oxide synthase in experimentally induced neurologic diseases. *Proceedings of the National Academy of Science USA*, 90: 3024-3027.
- Hamir, A. N., D.E. Snyder, C. A. Hanlon, and C. E. Rupprecht. 1993. A trematode (Phagicola sp.)-induced mesenteric lymphadenitis and enteritis in raccoons (Procyon lotor). *Veterinary Pathology* 30: 373-376.
- Hamir, A. N., D.E. Snyder, C. A. Hanlon, and C. E. Rupprecht. 1993. First report of Demodex sp. in raccoons (Procyon lotor). *Journal of Wildlife Diseases* 29: 139-141.
- 1992**
- Rupprecht, C. E., C. A. Hanlon, L. B. Cummins, and H. Koprowski. 1992. Primate responses to a vaccinia-rabies glycoprotein recombinant virus vaccine. *Vaccine* 10: 368-374.
- Hable, C. P., A. N. Hamir, D. E. Snyder, R. Joyner, J. French, V. Nettles, C. A. Hanlon, and C. E. Rupprecht. 1992. Prerequisites for oral immunization of free-ranging raccoons (Procyon lotor) with a recombinant rabies virus vaccine: study site ecology and bait system development. *Journal of Wildlife Diseases* 28: 64-79.
- 1991**
- Snyder, D. E., A. N. Hamir, C. A. Hanlon, and C. E. Rupprecht. 1991. Pancreatic duct hyperplasia in a raccoon (Procyon lotor) caused by Atrioaenia procyonis. *Journal of Wildlife Diseases* 27: 334-336.
- Snyder, D. E., A. N. Hamir, C. A. Hanlon, and C. E. Rupprecht. 1991. Lung lesions in an opossum (Didelphis virginiana) associated with Capillaria didelphis. *Journal of Wildlife Diseases* 27: 175-177.
- 1990**
- Dubey, J. P., A. N. Hamir, C. A. Hanlon, M. J. Topper, and C. E. Rupprecht. 1990. Fatal necrotizing encephalitis in a raccoon associated with a Sarcocystis-like protozoon. *Journal of Veterinary Diagnostic Investigations* 2: 345-347.
- 1989**
- Snyder, D. E., A. N. Hamir, C. A. Hanlon, and C. E. Rupprecht. 1989. Phagicola angrense (Digenea: Heterophyidae) as a cause of enteritis in the raccoon (Procyon lotor). *Journal of Wildlife Diseases* 25 : 273-275.
- Snyder, D.E., A. N. Hamir, C. A. Hanlon, and C. E. Rupprecht. 1989. Dirofilaria immitis in a raccoon

(Procyon lotor). Journal of Wildlife Diseases 25: 130-131.

Hanlon, C. A., D. E. Hayes, A. N. Hamir, D. E. Snyder, S. Jenkins, C. P. Hable, and C. E. Rupprecht. 1989. Proposed field evaluation of a rabies recombinant vaccine for raccoons (Procyon lotor): site selection, target species characteristics, and placebo baiting trials. Journal of Wildlife Diseases 25: 555-562.

Hanlon, C. A., E. L. Ziemer, A. N. Hamir, and C. E. Rupprecht. 1989. Cerebrospinal fluid analysis of rabid and vaccinia-rabies glycoprotein recombinant, orally-immunized raccoons (Procyon lotor). American Journal of Veterinary Research 50: 364-367.

Publications - chapters, reviews

Hanlon, CA. Chapter 215 Rabies. In: Textbook of Veterinary Internal Medicine, 7th edition. Ettinger and Feldman. (Submitted) Publication date: 2010.

Hanlon, CA, Niezgoda, M, Rupprecht. Animal Rabies. In; Rabies. Jackson AC, Wunner W (eds), Academic Press, New York. July 2007.

Niezgoda, M, Hanlon, CA, Rupprecht. Animal Rabies. In; Rabies. Jackson AC, Wunner W (eds), Academic Press, New York. February, 2002

Hanlon, C.A., L. A. Orciari. Rabies Virus. 1999. Encyclopedia of Life Sciences. Electronic format on the internet at <http://www.els.net>

Rupprecht, C.E. and C. A. Hanlon. 1997. Rabies. In: Viral Infections in Humans, 4th Edition (A.S. Evans and R. Kaslow, eds.). Plenum Publishing Corporation, New York, pp. 665-690.

Hanlon, C.A. and H. Koprowski. 1997. Rabies: Issues in transmission and infectivity. In: Mediguide to infectious Diseases (V. Andriole, J. Phair, and J. Remington, eds.). Lawrence DelleCorte Publications, Inc., NY. Vol.17 (Issue 4), pp. 1-7.

Hanlon, C.A. and H. Koprowski. 1997. Methods of Rabies. In: Conn's Current Therapy 1997 (R. Rakel, ed.). W. B. Saunders Co. Phila., pp. 130-135.

Hanlon, C.A. and Rupprecht, C.E. 1997. Rabies: new variations on an ancient motif. The Report on Pediatric Infectious Diseases: 7 (no. 7) 1-2.

Hanlon, C.A. and C.E. Rupprecht. 1998. The reemergence of rabies. In: Emerging Infections 1 (W. M. Scheld, D. Armstrong, and J. M. Hughes, eds.). American Society of Microbiology Press, Washington, D.C., pp. 59-80.

Dreesen, D.W., and C.A. Hanlon. 1998. Current recommendations for the prophylaxis and treatment of rabies. Drugs 56:801-809.

Hanlon, C. A. and C. E. Rupprecht. 1997. Considerations for immunocontraception among free-ranging carnivores: The rabies paradigm. In: Contraception in Wildlife Management (T. Kreeger, ed.). USDA APHIS Technical Bulletin #1853, Washington, D.C., pp.185-194.

Hanlon, C. A., J. R. Buchanan, E. P. Nelson, H. S. Niu, D. Diehl, and C. E. Rupprecht. 1993. A vaccinia-vectored rabies vaccine field trial: ante- and post-mortem biomarkers. Scientific and Technical Review of the O.I.E. (Office International des Epizooties) 12: (1) 99-107.

Rupprecht, C. E., C. A. Hanlon, A. N. Hamir, and H. Koprowski. 1992. Oral wildlife rabies vaccination: Development of a recombinant virus vaccine. Transactions of the 57th North American Wildlife and Natural Resources Conference. Wildlife Management Institute, Washington, D.C. pp. 439-452.