

## **CURRICULUM VITAE**

**Name:** Robert J. Novak

**Current Position:**

**University of South Florida**  
**College of Public Health**  
**Department of Global Health**  
**13201 Bruce B Downs Blvd., MCD56**  
**Tampa, FL 33612**  
*Primary Appointment: Professor of Global Health*

**Education:**

B.S. (Biology), 1969, University of Southern Colorado, Pueblo, CO.  
M.S. (Biology), 1971, University of Utah, Salt Lake City, Utah. Thesis: A systematic study of three species of mountain *Aedes* from the Sierra Nevada and Rocky Mountain ranges.  
Ph.D. (Entomology), 1976, University of Illinois, Urbana, Illinois. Thesis: The influence of oviposition site on focality of the inland floodwater mosquito.  
N.I.H. Post-Doctoral Fellow in Vector Biology and Parasitology, 1976-1978, University of Notre Dame, Notre Dame, Indiana.

**Research Interests:**

Integrated Pest and Disease Management, Vector Ecology, Medical Entomology, Mosquito Biology and Control, Parasitology

**Honors:**

Houston C. Sims Award for Outstanding Achievement in Biology, 1970  
University of Southern Colorado, Phi Kappa Phi.  
Presidential Citation, American Mosquito Control Association. 1993.  
President, American Mosquito Control Association, 1996-1997  
Board of Directors, American Committee of Medical Entomology, American Society of Tropical Medicine and Hygiene. 1997-2000  
Memorial Lecturer, American Mosquito Control Association, 1998.  
Distinguished Lecturer, Louisiana State University, Baton Rouge, LA. 1998.  
McNair Faculty Mentor Honor for Minority Scholars, Univ. IL 1999.  
Medal of Honor, American Mosquito Control Association, 2003.  
Fellow American Association for the Advancement of Science, 2004.  
President, Society of Vector Ecology. 2006 - 2007.  
Outstanding Alumni Achievement Award. Colorado State Univ. 2005.  
Health Science Foundation Award. 2007. University of Alabama-Birmingham School of Medicine.

**Professional Positions/Appointments History:**

University of Alabama-Birmingham, School of Medicine, Division of Infectious Diseases and William C. Gorgas Center for Geographic Medicine. Professor of Medicine, Professor School Public Health, Dept. Epidemiology, Professor Department of Biology. 2007-2011.  
Professional Scientist, Illinois Natural History Survey, Center for Economic Entomology Sections, 1989 to 2007.  
Professor (Affiliate), College of Veterinary Medicine, Department of Pathobiology, University of Illinois. 2004 to 2007.  
Professor (Affiliate), Veterinary Diagnostic Clinic, College of Veterinary Medicine, University of Illinois. 2002 to 2005.  
Research Scientist, National Center for Supercomputing Applications, University of Illinois. 1997 to 2007.  
Professor (Adjunct), University of Illinois, Institute of African Studies, 2002-2007  
Professor (Affiliate), Department of Entomology, University of Illinois. 1987 to 2007.

Professor (Adjunct), School of Public Health, University of Illinois, Chicago. 1993 - 1998.  
Research Director, Macon Mosquito Abatement District, Decatur, Illinois. 1986-1987.  
Adjunct Professional Scientist, Terrestrial Ecology Division, Center for Energy and Environmental Research, University of Puerto Rico. 1984-1986.  
Adjunct Research Entomologist, Department of Public Health, Vector Control Division, Commonwealth of Puerto Rico. 1981-1986.  
Research Entomologist, U.S. Public Health Service, Centers for Disease Control, Vector-borne Viral Disease Division, Dengue Branch, San Juan, Puerto Rico. 1980-1985.  
Research Entomologist, U.S. Public Health Service, Centers for Disease Control, Bureau of Tropical Diseases, Atlanta, Georgia. 1978-1980.  
Instructor, Purdue University-Westville, Westville, Indiana. 1977-1978.

### **Professional Experience:**

President, Society of Vector Ecology, 2006-2007.  
Member U.S. Environmental Protection Agency, Scientific Advisory Panel FIFRA, 2000 to date.  
Member WHO Vector Biology and Control, Expert Panel, 1999 –2004.  
Member WHO Pesticides Evaluation Committee, 1998-2004.  
Consultant/Collaborator, Chinese Academy of Sciences, BT Institute and Institute of Virology, Wuhan, China. 1998 to date.  
Member and Research representative for Phylogenetics and Genome Science Core Faculty, Biotechnology Center, University of Illinois. 1996-2000.  
Professor, Adjunct appointment, Department of Biology, Chulalongkorn University Bangkok, Thailand. 1998-2000.  
Consultant, U.S. Fish and Wildlife, Washington, DC. The Biology and Management of Mosquitoes and Mosquito-borne diseases on National Refuges and other Federal Wetlands. 1997-2000.  
Consultant, National Center for Supercomputing Applications. Leader on BioInformatrix for arthropod-borne infectious diseases with emphasis on Malaria. 1997 to 2002.  
Director, Champaign-Urbana-University St. Louis Encephalitis Control Program, C-U, Il. 1993 to 2007.  
Expert Witness, Avon, Inc. 1996-1997.  
Consultant, Medical Entomology, City of Chicago, Department of Health, Chicago Illinois. 1987 - 2007.  
Consultant, Medical Entomology, Metropolitan Sanitary District of Greater Chicago. 1987 - 2007.  
Member and Research representative Illinois Governor's Office (Thompson Administration). Task Force. Public Health and Solid Waste problems associated with used tires. 1987-1989.  
Technical Expert Medical Entomology, Illinois Pollution Control Board, 1987-1995.  
Consulting Entomologist, Champaign-Urbana University of Illinois Vector Control Program. 1988-1989.  
Expert Witness, Board of Trustees, Metropolitan Sanitary District of Greater Chicago, 1988-1989.  
Adjunct Research Entomologist, Department of Public Health, Vector Control Division, Commonwealth of Puerto Rico. 1981-1986.  
Adjunct Professional Scientist, Terrestrial Ecology Division, Center for Energy and Environmental Research, University of Puerto Rico. 1984-1986.  
Research Assistant, Department of Entomology, University of Illinois, Urbana, Illinois. 1973-1976.  
Research Entomologist, Macon Mosquito Abatement District, Decatur, Illinois. 1973-1976.  
N.I.H. Pre-doctoral Fellow, University of California at Los Angeles, Department of Biology. 1971-1972.  
Consulting Medical Entomologist, U. S. Virgin Islands, Ministry Health. 1983-85.  
Consulting Entomologist in Vector Biology, United States Agency for International Development, Honduras. 1984-1986.  
Consulting Entomologist in African Rift Valley Fever Ecology. U.S. Army Medical Virology Institute, Fort Detrick, Maryland, 1984-1986.  
Consultant P.A.H.O./W.H.O. *Aedes aegypti* biology and control in the Americas. 1982-1986.  
Consulting Vector Biologist, St. Joseph County Vector Control District, South Bend, Indiana, 1976-1978.

Entomologist-Supervisor, Vector Control Program, Cities of Champaign-Urbana and the University of Illinois, 1975-1976.

Chemist-Bacteriologist, Pueblo Board of Water Works, Pueblo, Colorado, 1968-69.

## **Funding/Grants**

### **Current Funding**

Novak, RJ. Bill and Melinda Gates Foundation. Integrated Vector Management in Cambodia. \$400,000, 2015-2017.

Novak, RJ. Hillsborough Department of Public Works. Integrated Vector Management County Level Surveillance System. \$1.5 million. 2016-2018 Pending.

Novak, RJ. Uganda Ministry of Health. Early Warning and Detection of malaria mosquitoes using Satellites and Mathematical Models in Uganda. \$4 million. 2017-2019 Pending.

### **Past Funding**

Unnasch, T (PI) Novak, RJ. –NIH R01-TW008508. Spatial modeling of Onchocerciasis foci in Africa by remote sensing. \$400,000, 8/2009-7/2013.

Novak, RJ. USAID Uganda. Malaria Risk Map. \$150,000 2012, \$250,000 2013 Pending.

Novak, RJ (Co-I), B. Chi (PI). NIH IeDEA. Malaria Research preparedness Zambia. \$347,027. 10/2009-8/2011.

Novak, RJ. NIH-T32 (A1055438). Agents of International Health & Bioterrorism. \$285,022. 2/2011

Novak, RJ. 2010. University Alabama-Birmingham. Health Science Foundation Award, \$100,000.

Novak, RJ. NIH Supplement. Microbial Control of Immature Anopheles Mosquitoes. \$550,000. 2005-2008.

Novak, RJ. NIH. Microbial Control of Immature Anopheles Mosquitoes. \$3.9 million. 2003-2008.

Novak, RJ. NIH-T32 (A1055438). Agents of International Health & Bioterrorism. \$285,022 2008

Novak, RJ. 2007. University Alabama-Birmingham. Health Science foundation Award, \$100,000.

Novak, RJ. NIH Consulting Investigator, Exploratory Centers Grants (U Miami, J Beier PI). 2004-2006. \$8,000.

Novak, RJ. Illinois Department of Natural Resources. Waste Tire Act Grant: Arthropod and Vector-borne Disease Research. 2000-2005. \$200,000 per year.

Novak, RJ. University Illinois, Champaign, Urbana, and Savoy; St. Louis Encephalitis Surveillance and Control Program. \$71,000. FY2004-2005.

Novak, RJ. USDA/CREES 2005-34523. Ecology and Management of West Nile Virus. \$435,000. 2005-2006.

Novak, RJ. US Public Health Service, Centers for Disease Control. West Nile Virus: A Potential Threat to Illinois. \$600,000, 2001-2004.

Novak, RJ. University Illinois, Champaign, Urbana, and Savoy; St. Louis Encephalitis Surveillance and Control Program. \$71,000. FY2003.

Novak, RJ. Investigator, NIH ICIDR “Malaria in Africa” (U Miami, J Beier,PI) 2001-2005.

Novak, RJ. SBC. The distribution and ecology of mosquitoes and West Nile virus in telecommunications utility vaults in Cook County, Illinois, \$25,000, 2003.

Novak, RJ. Valent BioScience Corporation. The use of microbial insecticides to manage malaria in Eritrea and Kenya. \$30,000, 2002-2003.

- Novak, RJ (P.I.). National Institutes of Health (NIH). Biomedical Research Grant (S06RR-08102-10), with DJ. Gubler. Dengue Fever: Diagnosis and control. 1982-1985.
- Novak, RJ. (P.I.). Illinois DENR. Pesticide resistance, non-pesticide alternatives and control of mosquitoes. \$40,000. FY89.
- Novak, RJ. (P.I.). Metropolitan Sanitary District, Chicago. Distribution and Control of mosquitoes in scrap tires. \$1,750. 1988.
- Novak, RJ. (P.I.). Various Donors Grant, Abbott Laboratories. Mosquito biology research. \$1,500. 1988-1989.
- Novak, RJ. (P.I.). University of Illinois Research Board. \$3,500. For container inhabiting mosquitoes studies. 1988-1989.
- Novak, RJ. (P.I.). Illinois Environmental Trust Fund. Biological studies of container inhabiting mosquitoes tires. \$17,000. FY 1988.
- Novak, RJ. (P.I.). Bio-Medical Research Board. Flight Chamber construction with Michael Irwin. \$10,000. October 1988.
- Novak, RJ. (Co-P.I.). Flight Chamber construction with M. Irwin and S. Isard. School of Agriculture. \$12,000. 1989.
- Novak, RJ. (P.I.). Various Donors Grant, Alberto Culver. Studies on mosquito biting behavior and control. \$2,400. 1990.
- Novak, RJ. (P.I.). Illinois DENR. Vector biology of arthropods inhabiting waste tires and other artificial and natural containers. \$515,000. 1990-1991.
- Novak, RJ. (P.I.). Illinois DENR. Vector Biology of arthropods inhabiting waste tires and other artificial and natural containers. \$275,000. 1991-1992.
- Novak, RJ. (P.I.). Illinois DENR. Vector Biology of arthropods inhabiting waste tires and other artificial and natural containers. \$330,000. 1992-1993.
- Novak, RJ. (P.I.) Illinois DENR. Vector Biology of arthropods inhabiting waste tires and other artificial and natural containers. \$330,000. 1993-94.
- Novak, RJ. ( P.I.) Abbott Laboratories. Cellular Fatty Acid analysis of *Bacillus thuriengensis*. \$5,000. 1993.
- Novak, RJ. (P.I.). University of Illinois, Research Board. Detection of St. Louis Encephalitis virus in it mosquito host under field conditions in Southern Illinois. \$4,000. 1993-94.
- Novak, RJ. (P.I.). United States Department of Defense, Walter Reed Army Hospital, with Dr. Daniel Strickman. Magnetic resonance in adult mosquitoes. \$12,500. 1994-95.
- Novak, RJ. (P.I.). Abbott Laboratories. Cellular Fatty Acid analysis of *Bacillus thuriengensis*. \$15,000.1995.
- Novak, RJ. (P.I.). Abbott Laboratories. Duration of larvicidal activity of *Bacillus sphaericus* in tires and other artificial containers. \$10,000. 1995.
- Novak, RJ. (P.I.). International Foundation for Ethical Research. Replacement of animals for arboviral surveillance. \$21,800. 1995.
- Novak, RJ. (P.I.). Illinois DENR. Vector Biology of arthropods inhabiting waste tires and other artificial and natural containers. \$325,000. 1994-1995.
- Novak, RJ. (P.I.). IL DCCA. Arthropod and Vector-borne Disease Research: Extension from FY95, \$158,000. 1995- 1996.
- Novak, RJ. (P.I.) Development of Soy Oil formulations to control mosquitoes and other insects. Illinois Soy Bean Board. \$292,948. 1994 -1996.
- Novak, RJ. (P.I.), and MH Vodkin(Co-PI). International Foundation for Ethical Research. Replacement of animals for arboviral surveillance. \$24,800. 1995 -1996.
- Novak, RJ. Abbott Laboratories. Field studies on the efficacy of *Bacillus sphearicus* formulations in waste tires. \$10,000. 1995.
- Novak, RJ. (P.I.) with JP Siegel, AR Smith. Abbott Laboratories, Fatty acid analysis of *Bacillus thuringiensis*. \$15,000.

- Novak, R.J. (Mentor). Summer Research Opportunity Program (SROP), University of Illinois. Evelena Ontiveros. \$3,100. 1995-1996.
- Novak, R.J. (Mentor). McNair Scholars Program, University of Illinois. Brandy Howard. \$3,500. 1995-1996.
- Novak, R.J. (Mentor). Howard Hughes Undergraduate Fellows, University of Illinois. Timothy Schaub, Evelena Ontiveros, Khizer Husain. Student salary plus lab fund of \$2,500. 1996-1997.
- Novak, R.J. Abbott Laboratories. Field studies on the efficacy of *Bacillus sphaericus* formulations in waste tires. \$10,000. 1996.
- Novak, R.J. (P.I.). Illinois Department of Natural Resources. Arthropod and Vector-borne Disease Research. \$800,000. 1997-2000.
- Novak, R.J. (P.I.). Illinois Soy Bean Board. Development of Soy Oil formulations to control mosquitoes and other insects. \$425,000. 1996-1999.
- Novak, R.J. Abbott Laboratories. Field studies on the efficacy of *Bacillus sphaericus*. \$12,000. 1996-1997.
- Novak, R.J. Illinois Department of Commerce and Community Affairs. Waste Tire Act Grant: Arthropod and Vector-borne Disease Research. \$78,000. 1997-1998.
- Novak, R.J. A Rapid Assay to Predict the Ovipositional Behavior of the Western Corn Rootworm. University of Illinois C-FAR. \$56,000. FY1996-1997.
- Novak, R.J. Illinois Department of Natural Resources. Waste Tire Act Grant: Arthropod and Vector-borne Disease Research. \$200,000 per year. 1997-1999.
- Novak, R.J. University Illinois-Champaign, Urbana, and Savoy; St. Louis Encephalitis Surveillance and Control Program. \$24,000.
- Novak, R.J. Abbott Laboratories. Gift for mosquito/pathogen research. \$24,000, 1997-1999.
- Novak, R.J. Valent BioScience. Gift for mosquito/pathogen research. \$24,000. 2000-2001.

### **Teaching Experience:**

- University of Alabama at Birmingham, School of Public Health. Ecology and Epidemiology of Arthropod-borne Diseases. 2007- 2011
- University of Alabama at Birmingham, School of Medicine. Arthropod-borne viruses. 2007 - 2011
- University of Illinois Campus Honors Program. Undergraduate student Mentor. McNair Scholars Program 1993-2006.
- University of Illinois, Department of Entomology, Medical Entomology. Note name change: ECOLOGY OF ARTHROPOD-BORNE DISEASES. Taught course Spring Semester 2006.
- Instructor Vector Biology, International Center for Public Health Research, The Wedge, University of South Carolina. 1984-1986.
- Instructor Vector Biology and Control. Centers for Disease Control, Bureau of Tropical Diseases. 1978-1980.
- Instructor in Vector Biology and Control with D. J. Gubler and S. Waterman. Epidemiology and Control of Dengue, University of Puerto Rico, School of Medicine. 1982-1986.
- Adjunct Assistant Professor. Purdue University, Westville, Indiana. General Entomology. 1977-1978.
- Teaching Assistant. Department of Biology, University of Utah. 1969-1971.
- Undergraduate Assistantship. Department of Biology, University of Southern Colorado 1967-1969.

### **Publications:**

#### **Journal articles:**

1. Novak, RJ and JH Linam. 1970. The *Aedes* mosquitoes of the Front Range of Custer County, Colorado. 1970. Proceeding Utah Mosquito Abatement Association, 23: 42-46.
2. Novak, RJ, GC Ferris and JH Linam. 1970. Tagging and transfer of Strontium-85 in *Culiseta incidens* (Thomson) larvae. Proceeding Utah Mosquito Abatement Association, 23: 40-42.
3. Horsfall, W. R., R. J. Novak and F. L. Johnson. 1975. *Aedes vexans* as a flood-plain mosquito. Environmental Entomology, 1: 28-35.
4. Novak, R. J. and K. K. Liem. 1975. Induced copulation; Effects of humidity. Mosquito News, 35: 409-410.

5. Novak, R. J. and D. Shroyer. 1978. Hatching behavior of the tree rot hole mosquitoes, *Aedes triseriatus* and *Aedes hendersoni*. Mosquito News, 38: 515-521.
6. Saul, S. H., R. J. Novak and Q. E. Ross. 1980. The role of the larval stage in the ecological separation of two subspecies of *Aedes aegypti*. American Midland Naturalist, 104: 118-134.
7. Novak, R. J., J. J. Peloquin and W. R. Rohrer. 1981. Vertical distribution of mosquitoes in a Northern deciduous forest. Journal Medical Entomology, 18: 116-122.
8. Novak, R. J. and J. J. Peloquin. 1981. A substrate modification for the oviposition trap used for detecting the presence of *Aedes triseriatus*. Mosquito News, 41: 180-181.
9. Novak, R. J. 1981. Oviposition sites of *Aedes vexans* (Mg.): Wet prairie foci. Canadian Entomologist, 113: 57-64.
10. Miller, S. and R. J. Novak. 1983. A comparative study of esterases in two strains of Anopheline mosquitoes by isoelectric focusing. International Journal Biochemistry, 15: 1409-1415.
11. Novak, R. J., D. Moss and H. Byrd. 1985. High resolution gradient polyacrylamide electrophoresis of isoenzymes of the mosquito *Aedes aegypti*. J. American Mosquito Control Association, 1: 353-355.
12. Miller, S. and R. J. Novak. 1985. Analysis of lipids by gas-liquid chromatography and complimentary methods in four strains of *Aedes aegypti*. Comparative Biochemistry Physiology, 8: 235-240.
13. Novak, R. J., D. J. Gubler and D. Underwood. 1985. Evaluation of slow-release formulations of temephos (Abate) and *Bacillus thuringensis var. israelensis* for the control of *Aedes aegypti* in Puerto Rico. J. American Mosquito Control Association, 1: 449-453.
14. Gubler, D. J., R. J. Novak, E. Vergne, N. A. Colon, M. Velez and J. Fowler. 1985. *Aedes (Gymnometopa) mediiovittatus*, a potential maintenance vector of dengue viruses in Puerto Rico. Journal Medical Entomology, 22: 469-475.
15. Waterman, S. H., R. J. Novak, G. E. Sather, R. E. Bailey, I. Rios and D. J. Gubler. 1985. Dengue transmission in two Puerto Rican communities, 1982. American Journal Tropical Medicine Hygiene, 34: 625-632.
16. Gargan, T.G., R. J. Novak and P. T. Jupp. 1988. The influence of floodwater mosquitoes and the transmission of Rift Valley Fever transmission in South Africa. Medical Veterinary Entomology, 2: 231-236.
17. Kintron, U.D., D.W. Webb and R.J. Novak. 1988. Oviposition behavior of *Aedes triseriatus* (Diptera:Culicidae): Prevalence, intensity and aggregation of eggs in oviposition traps. Journal Medical Entomology, 26: 462-467.
18. Novak, R. J., B. A. Steinly, D. W. Webb, L. Haramis, J. Clarke, B. Farmer, and R. Cieslik. 1990. Penetration rates of two pesticide carriers at a large used-tire storage facility in Chicago, Illinois. Journal American Mosquito Control Association, 6: 188-196.
19. Steinly, B.A., R.J. Novak, and D.W. Webb. 1991. A new method for monitoring mosquito oviposition in artificial and natural containers. Journal American Mosquito control Association. 7: 649-650.
20. Siegel, J.P., R. J. Novak, and J.V. Maddox. 1992. Factors affecting the wing length of field collected *Aedes triseriatus* (Say) (Diptera: Culicidae) in Central Illinois. Journal Medical Entomology, 29: 968-973.
21. Siegel, J.P., R.J. Novak, R.L. Lampman, and B.A. Steinly. 1992. An appraisal of methods used to estimate body weight of mosquitoes (Diptera: Culicidae). Journal Medical Entomology, 29: 711-714.
22. Howe, D.K., M.H. Vodkin, R.J. Novak, R.E. Shope, and G.L. McLaughlin. 1991. Polymerase chain reaction (PCR) detects St. Louis Encephalitis viral RNA. Journal Molecular Virology. 36: 101-110.
23. Howe, D.K., M.H. Vodkin, R.J. Novak, R.E. Shope, C.J. Mitchell, and G.L. McLaughlin. 1992. Detection of the St. Louis encephalitis virus in mosquitoes by use of the polymerase chain reaction. Journal American Mosquito Control association. 8: 333-335.
24. Hanson, S.M., J-P. Mutebi, G.B. Craig, Jr., and R.J. Novak. 1993. Reducing the overwintering ability of *Aedes albopictus* by male release. Journal American Mosquito Control association, 9: 1-6.
25. Duhrkopf, R.E., W. K. Hartberg and R. J. Novak. 1993. Determination of equilibrium gene frequencies for a polygenic trait in the mosquito *Aedes aegypti*. Bulletin of the Society of Vector Ecologist, 18: 49-60.

26. Siegel, J.P., A.P. Smith, J.V. Maddox, and R.J. Novak. 1993. Use of cellular fatty acid analysis to characterize commercial brands of *Bacillus thuringiensis* var. *israelensis*. *Journal American Mosquito Control Association*, 9: 330-334.
27. Vodkin, M.H., G.L. McLaughlin, J.F. Day, R.E. Shope, and R.J. Novak. 1993. A rapid diagnostic assay for eastern equine encephalomyelitis viral RNA. *American Journal tropical Medicine and Hygiene*, 49: 772-776.
28. Vodkin, M.H., T. Streit, C.J. Mitchell, G.L. McLaughlin, and R.J. Novak. 1994. PCR-based detection of arboviral RNA in field samples. *Biotechniques*, 17:114-116.
29. Siegel, J.P., A. Ray Smith, and R.J. Novak. 1995. Cellular Fatty Acid analysis of ONR-60A. *Journal American Mosquito Control Association*, 11: 176-185.
30. Hanson, S.M., R.J. Novak, R.L. Lampman, and M.H. Vodkin. 1995. Notes on the biology of *Orthopodomyia* in Illinois. *Journal American Mosquito Control Association*, 11: 375-376.
31. Vodkin, MH, L. Szymczak, M. Koll, R. Cieslik, and R.J. Novak. 1995. Mosquito productivity and surveillance for St. Louis encephalitis virus in Chicago during 1993. *Journal American Mosquito Control Association*, 11:302-306.
32. McLaughlin, GL, SS Senyonga, E. Nanteza, OW Rubaire-Akiiki, RD Hansen, MH Vodkin, RJ Novak, et al. 1995. PCR-based detection of parasites (Chapter 25). *In*, *Parasitology for the 21st Century: ICOPA VIII*. Ozcel and Alkan (Eds.), pp. 261-278.
33. Debrunner-Vossbrinck, BA, CR Vossbrinck, MH Vodkin, and RJ Novak. 1995. Restriction analysis of the ribosomal DNA internal spacer region of *Culex restuans* and mosquitoes in the *Culex pipiens* complex. *Arthropod-Borne Virus Information Exchange*, pp. 15.
34. Siegel, JP, AR Smith, and RJ Novak. 1995. Cellular fatty acid analysis of ONR-60A. *Journal American Mosquito Control Association*, 11: 176-185.
35. Lampman, RL and RJ Novak. 1996. Oviposition preferences of *Culex pipiens* and *Culex restuans* for infusion-baited traps. *J. American Mosquito Control Association*, 12: 23-32.
36. Lampman, RL and RJ Novak. 1996. Attraction of *Aedes albopictus* adults to sod infusions. *J. American Mosquito Control Association*, 12: 119-124.
37. Novak, R.J. 1996. A North American model to contain the spread of *Aedes albopictus* through tire legislation. *In* "Geographic spread of *Aedes albopictus* in Europe and the concern among Public Health Authorities. *Parasitologia*, 37(2-3): 129-139.
38. Vodkin, MH, RJ Novak and GL McLaughlin. 1996. Databases searches with multiple oligopeptides containing ambiguous residues. *BioTechniques*, 21: 1116-1117.
39. Lampman, RL and RJ Novak. 1996. Alternative larvicidal control agents for mosquitoes: surfactants and soy oils. *Vector Control Bulletin North Central States*, 5: 99.
40. Nawrocki, SJ, YH Randle, MH Vodkin, JP Siegel, and RJ Novak. 1996. Evaluation of a Reverse Transcriptase-Polymerase Chain Reaction assay for detecting St. Louis encephalitis virus using field-collected mosquitoes (Diptera: Culicidae). *J. Medical Entomology*, 33:123-127.
41. Hanson, SM, RL Lampman, RJ Novak and PM Purseglove. 1996. *Aedes albopictus* and *Ae. triseriatus* eggs survive waste tire processing. *J. American Mosquito Control Association*, 12: 728-729.
42. Siegel, JP, R Cieslik, J Thennisch, L Clarke, Jr., and RJ Novak. 1996. Dispersal of 10-14 mesh corncob granules in stacked tires. *J. American Mosquito Control Association*, 12(2): 325-328.
43. Siegel, JP, AR Smith and RJ Novak. 1997. Comparison of the Cellular Fatty Acid composition of a bacterium isolated from human and alleged to be *Bacillus sphaericus* with that of *Bacillus sphaericus* isolated from a mosquito larvicide. *Applied and Environmental Microbiology*, 63: 1006-1010.
44. Howe, DK, MH Vodkin, RJ Novak, G. Visvesvara and GL McLaughlin. 1997. Identification of two genetic markers that distinguish pathogenic and nonpathogenic strains of *Acanthamoeba* spp. *Parasitological Research*, 83: 345-348.
45. Lampman, RL, SM Hanson and RJ Novak. 1997. The seasonal abundance and distribution of mosquitoes at a rural waste tire-yard in Illinois. *J American Mosquito Control Association*, 13: 193-201.

46. Hanson, SM, RJ Novak Lampman, RL, MH Vodkin, and WG Ruesink. 1997. Larval habitats and populations in a temperate urban environment. J. American Mosquito Control Association, 13: 233-236.
47. Siegel, JP and RJ Novak. 1998. Field trials of VectoLex CG, a *Bacillus sphaericus* larvicide in Illinois waste tires and storm drains. J. American Mosquito Control Association, 13: 305-310.
48. Chadee, DD, RA Ward and RJ Novak. 1998. Natural habitats of *Aedes aegypti* in the Caribbean - A review. J. American mosquito Control Association, 14: 5-11.
49. Novak, R.J. 1998. The AMCA - Review, update and future course. Presidential Address. J. American Mosquito Control Association, 14: 1-4.
50. Ukenbach, U., RL Lampman, DS Seigler, J. Ebinger, and RJ Novak. 1999. Mosquitocidal activity of acetylenic compounds from *Cryptotaenia canadensis* (L.) (Apiaceae). J. Chemical Ecology, 25:1885-1893.
51. Siegel, J.P. and R.J. Novak. 1999. Duration of activity of the microbial larvicide VectoLex CG (*Bacillus sphaericus*), in Illinois catch basins and waste tires. J. American Mosquito Control Association, 15: 366-370.
52. Reno, HE, MH Vodkin and, RJ Novak. 2000. Differentiation of *Aedes triseriatus* (Say) and *Aedes hendersoni* Cockerell (Diptera:Culicidae) by restriction fragment length polymorphisms of mplified ribosomal DNA. Am. J. Tropical Medicine Hygiene, 62:193-199.
53. Jensen, T., RL Lampman, MC Smaleka, and RJ Novak. 2000. Field evaluation of the relative efficacy of commercially available anti-mosquito products in the midwestern United States. J. American Mosquito Control Association, 16:148-153.
54. Strickman, B. Timberlake, J. Estrada-Franco, M. Weissman, P.W. Fenimore, and R.J. Novak. 2000. Effects of Magnetic Fields on Mosquitoes. J. American Mosquito Control Association, 16:131-138.
55. Lampman, R, U. Eckenbach, D. Siegler and R. Novak. 2000. Laboratory evaluations of methylated Soy Oils and Monoterpenes as mosquito larvicides. J. American Mosquito Control Association, 16:153-158.
56. Siegel, JP, AR Smith, and RJ Novak. 2001. Persistence of commercially produced *Bacillus thuringiensis* serovar *israelensis* and *Bacillus sphaericus* in tires and prevalence of bacilli in artificial and natural containers. J. American Mosquito Control Association, 16: 455-467.
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155. Jacob B.G, Griffith D.A., Mwangangi J.M. Mbogo C., Novak RJ. 2010 Uniform Convergence of Ergodic Markov Chains Using Gaussian Quadratures in SAS PROC NL MIXED for Calculating Marginal Likelihoods in Space Time-Varying Coefficients Of Urban *Anopheles gambiae s.l.* aquatic Habitats *Acta Paristology of China*, 14: 3 41-53.
156. Jacob BG, Burkett N, Luvall J, Parcak S, McClure CJW, Estep L, Hill GE, Cupp EW, Novak RJ, Unnasch TR. 2010. Developing GIS-Based Eastern Equine Encephalitis Vector-host Models in Tuskegee, Alabama. *International Journal Health Geographics*, 9:12-21.
157. Jacob BG, Burkett-Cadena ND, Luvall JC, Parcak SH, McClure CJW, Estep LK, Hill GE, Cupp EW, Novak RJ, Unnasch TR. 2010. Developing GIS-based eastern equine encephalitis vector-host models in Tuskegee, Alabama. *International Journal of Health Geographics* **9**:12.
158. Gu, W., R. Novak. 2010 Agent-based modeling of mosquito foraging for malaria control. *Trans R Soc Trop Med Hyg.*,103: 1105.
159. Jacob, Benjamin G., Dave D. Chadee, Robert J. Novak. 2011. Adjusting Second Moment Bias in Eigenspace Using Bayesian Empirical Estimators, Dirichlet Tessellations and Worldview I Data for Predicting *Culex quinquefasciatus* Habitats in Trinidad: Models for West Nile Vectors. *Journal Geographic Information System*, 2011, 2, 244-274.
160. Jacob BG, Griffith DA, Mwangangi JM Gathings DG, Mbogo CB, Novak RJ. 2011. A cartographic analyses using spatial filter logistic model specifications for implementing mosquito control in Kenya. *Urban Geography*, 32: 363-377.
161. Jacob BG, Morris JA, Caamano EX, Griffith DA, Novak RJ 2011. Geomapping generalized eigenvalue frequency distributions for predicting prolific *Aedes albopictus* and *Culex quinquefasciatus* habitats based on spatiotemporal field-sampled count data. *Acta Trop.*, 2:61-68.
162. Jacob B.G., Chadee D.D., Novak R.J., 2011 Adjusting second moment bias in eigenspace using Bayesian empirical estimators, Dirichlet tessellations and Worldview 1 data for predicting *Culex quinquefasciatus* in Trinidad. *Journal of Geographic Information Systems*, Vol 2: 244-274.

163. Jacob BG, Griffith DA, Mwangangi JM Gathings DG, Mbogo CB, Novak RJ. 2011. A cartographic analyses using spatial filter logistic model specifications for implementing mosquito control in Kenya Urban Geography, 32: 363-377
164. Jacob BG. Toe L. Sanfo MS., Afriyie A., Ibrahim MI., Griffith DA, Novak RJ. 2011. Quasi-likelihood techniques in a logistic regression equation and probability density functions from an inverse Wishart-distributed matrix for identifying intra-cluster covariate coefficients of *Simulium damnosum s.l.* riverine habitats in Togo. *Geospatial Information Science*, (in press).
165. Jacob BG. Mwangangi JM Mbogo CB, Novak RJ. 2011. A Taxonomy of Unmixing Algorithms Using Li-Strahler Geometric- Optical Model and other Spectral Endmember Extraction Techniques for Decomposing a QuickBird Visible and Near Infra-red Pixel of an *Anopheles arabiensis* Habitat. *Open Remote Sensing*, (2011 in press)
166. Jacob BG. Griffith DA, Mwangangi JM Mbogo CB, Novak RJ. 2011. Using a Auto-Gaussian Jacobian term normalizing factor and a biparametric simultaneous autoregressive analyses for detecting negative spatial autocorrelation in an *Anopheline arabiensis* aquatic habitat model. *Journal Environmental Statistics*, (2011 in press).
167. Weidong Gu, Günter Müller, Yosef Schlein, Robert J. Novak, John C. Beier. 2011. Natural plant sugar sources of *Anopheles* mosquitoes strongly impact malaria transmission potential. *PLoS ONE* 6(1): e15996. doi: 10.1371/journal.pone.0015996.
168. Jacob BG, JM Mwangangi, CB Mbogo, and Novak, RJ. 2011. A Taxonomy of Unmixing Algorithms Using Li- Strahler Geometric- Optical Model and other Spectral Endmember Extraction Techniques for Decomposing a QuickBird Visible and Near Infra-red Pixel of an *Anopheles arabiensis* habitat. *Open Remote Sensing*, 12 :(4): 1-25.
169. Jacob BG Toe L. Sanfo MS., Afriyie A., Ibrahim MI., Griffith DA, Novak RJ Unnasch Thomas. 2012. Quasi likelihood techniques in a logistic regression equation and probability density functions from an inverse Wishart-distributed matrix for identifying intra-cluster covariate coefficients of *Simulium damnosum s.l.* riverine habitats in Togo. *Geospatial Information Science*, 15 (3):117-133.
170. Jacob BG. Alwiss R., Caliskan S., Griffith DA, Dossanayake G and Novak, RJ. 2013. Random Effects Regression Specification Using a Local Intercept Term and a Global Mean for Forecasting Malarial Prevalance. *American Journal of Computational and Applied Mathematics*, 3(2): 49-67.
171. Jacob BG., Krapp F, Ponce M, Gotuzzo E, Griffith DA. Novak R J. 2013. Bayesian Poisson specification with a conditionally autoregressive prior and a residual Moran's coefficient minimization criterion for quantitating leptokurtic distributions in regression-based multi-drug resistant tuberculosis treatment protocols. *American Journal of Public Health and Epidemiology*, 5(3): 122-143.
172. Jacob BG, Novak R J. Toe L D., Sanfo M. Griffith DA, Lakwo T L., Habomugisha P. , Katarbarwa MN and Unnasch TR. 2013 Validation of a remote sensing model to identify *Simulium damnosum s.l.* breeding sites in sub-Saharan Africa. (Submitted PLOS Neglected Tropical Diseases).
173. Jacob BG, Novak R J., Toe L, Sanfo MS., Caliskhan S. Pare A., Mounkaila N., Yameogo L., Unnasch T. 2013. Unbiasing a stochastic endmember interpolator using ENVI object-based classifiers, and Boolean statistics for forecasting canopied *Simulium damnosum s.l.* riverine larval habitats in Burkina Faso. (Submitted *Geophysics and Remote Sensing*).
174. Jacob BG. Novak RJ Toe L. Sanfo MS., Griffith DA, Yameogo L., Unnasch Thomas. 2013. Denoising a Box-Jenkins seasonal Autoregressive-Integrated Moving Average model employing prefiltered Euclidean-based surrogates for quantizing Onchocerciasis endemic transmission zones in Burkina Faso (submitted *Geojournal*).
175. Jacob BG and Novak RJ. 2013. Using a Auto-Gaussian Jacobian term normalizing factor and a biparametric simultaneous autoregressive analyses for detecting negative spatial autocorrelation in an *Anopheline arabiensis* aquatic habitat model. (Submitted *Journal of Spatial Statistics*).
176. Jacob B.G, Mendoza D.M, Ponce M., Caliskan S., Moradi M, Gotuzzo E., Griffith D.A., Novak R.J. 2014 Pseudo R<sup>2</sup> Probablity Measures, Durbin Watson Diagnostic Statistics and Einstein Summations for Deriving Unbiased Frequentistic Inferences and Geoparameterizing Non-Zero First-Order Lag

Autocorvariate Error in Regressed Multi-Drug Resistant Tuberculosis Time Series Estimators *American Journal of Applied Mathematics and Statistics* 2(5):252-301.

177. Jacob BG. J., Novak L. Toe, Sanfo, S. Caliskan, Unnasch T. 2014. Denoising a model employing automated bandwidth selection procedures and pre-whitened Euclidean-based quadratic surrogates in PROC ARIMA for optimizing asymptotic expansions and simulations of onchocerciasis endemic transmission zones in Burkina Faso *Journal of Public Health and Epidemiology* 6(11): 347-389.
178. Jacob B.G. and Novak R.J. 2015 Integrating a Trimble Recon X 400 MHz Intel PXA255 Xscale CPU® Mobile Field Data Collection System Using Differentially Corrected Global Positioning System Technology and a Real-Time Bidirectional Actionable Platform within an ArcGIS Cyberenvironment for Implementing Malaria Mosquito Control. *Advances in Remote Sensing*; 3(3):141-196
179. Jacob BG, Novak RJ, Toe LD, Sanfo M, Griffith DA, Lakwo Unnasch T. Ecogeographically and Non-Ecogeographically Forecasting Discontinuously Canopied Seasonally Hyperproductive Trailing Vegetation Precambrian rock *Simulium damnosum* s.l., Eco-epidemiological Capture Point Morphometrics by Geo-spectrotemporally Iteratively Stochastically Interpolating Metrizable Sub-Mixel Mean Solar Exoatmospheric Quantum Scalar Irradiance Wavelength Periodicities where  $\theta_i$  is a Zenith Angle and Diatomically Etiolated Xanthophylls with Azimutually Isotropic Sources of Chloroplastic Carotenoid Zeaxanthins Stoichiometrically Extracted from a RapidEye™ Red Edge Normalized Difference Vegetation Index Reference Biosignature: A Case Study in Burkina Faso and Uganda (*Journal of Geophysics and Remote sensing* 2015 5(1);. 12-103.
180. Jacob B.G. and Novak R.J. 2015 Pernicious quasi-normal non-monotonic Poissionian non-negativity constraints for optimally rectifying incompatibilistic endogeneity in sub-meter resolution pseudo-Euclidean regression space employing analogs of the Pythagorean theorem and parallelogram laws for semi-parameterically demarcating non-trivial land cover wavelength filters and time series impulse-response metrological functions in an invertible Hermitian transjugate matrix while consolidating synergistic semi-logarithmic non-ordinate axis-scaled covariances in C++ for forecasting episodic yellow fever sylvatic, case distributions in an eco-georeferenceable irrigated riceland complex in Gulu, Uganda *Journal of Applied Mathematics and Statistics*, ( in press)

#### **Books/Invited Chapters**

- Jacob B.G., Morris JA, Cammano EX, Griffith DG, Novak RJ. 2011. Testing for first-order autocorrelation error in a residual regression analysis of spatiotemporal-sampled *Culex quinquefasciatus* and *Aedes albopictus* habitat observational covariates using Durbin-Watson statistic and sub-meter resolution satellite explanatory predictors. Pp 111-126. Ed., Masa Vidovic. In *Encephalitis* (In-Tech Publication New York New York, USA) <http://www.intechweb.org/>
- Novak, RJ, Peter Burgess, Ian Brooks. 2009. Integrated Malaria Management. *In*, Vector Biology, Ecology and Control, Ed. Peter W. Atkinson. Springer Dordrecht, Heidelberg, London, New York. Co. 260 pp.
- Novak, RJ and RL Lampman. 2009. Public Health Pesticides. In: *Handbook of Pesticide Toxicology: Principals* Vol. 1, 4<sup>th</sup> Ed. Krieger, Academic Press, NY, NY , 2 vols., 912 pp.
- Yaremych SA, Warner RE, Mankin PC, Brawn JD, Raim AJ, and Novak RJ. 2006. West Nile virus causes high mortality in a free-ranging population of American Crows. *In* *Wildlife Diseases: Landscape Epidemiology, Spatial Distribution and Utilization of Remote Sensing Technology*. S.K. Majumdar; J. Huffman, F.J., Brenner, and A.I. Panah, Editors. Pennsylvania Academy of Sciences. Pages 200-204.
- GJ Gerberg, and RJ Novak. 2006. Considerations on the use of Botanical-Derived Repellent Products. *In* *Insect Repellents: Principals, Methods and Uses*. Debboun, Francis and Strickman, Editors. CRC Press, Taylor & Francis Group, Boca Raton, FL, Chapter 15, pp. 305-311.
- Novak, RJ and RL Lampman. 2001. Public Health Pesticides. In: *Handbook of Pesticide Toxicology*, 3<sup>rd</sup> Ed. Krieger, Volume 1 Principals, 181-201pp. Academic Press, NY, NY.
- McLaughlin, G.L., R. J. Novak, et al. 1995. PCR-based Detection and Typing of Parasites. *In* Ozel and Atkin eds., *Parasitology for the 21st Century*. International Congress of Parasitology, 261-278 pp.



- Novak, RJ and W. R. Horsfall. 1994. The Biology of the Inland Floodwater Mosquito, *Aedes vexans*: A annotated bibliography, Part 3. American Mosquito Control Association, Lake Charles, LA, 125 pp.
- Metcalf, R.L. and R.J. Novak. 1994. Pest Management in Human and Animal Health. In Insect Pest Management. Editors R.L. Metcalf and W.H. Luckmann. John Wiley & Sons, Inc. N.Y.
- Horsfall, W. R. and R. J. Novak. 1990. The Biology of the Inland Floodwater Mosquito, *Aedes vexans*: A annotated bibliography, Part 1. American Mosquito Control Association, Lake Charles, LA, 249 pp.
- Novak, RJ and W. R. Horsfall 1992. The Biology of the Inland Floodwater Mosquito, *Aedes vexans*: A annotated bibliography, Part 2. American Mosquito Control Association, Lake Charles, LA, 190 pp.
- Gubler, D. J., R. J. Novak and C. J. Mitchell. 1982. Arthropod vector competence - Epidemiological, genetic and biological considerations. In "Recent Developments in the Genetics of Insect vectors," Rockefeller Foundation, Bellagio, Italy. pp. 325-392.

#### **Presentations (Invited)/Workshops (from 2000)**

1. Symposium: organized/moderated, Memorial Symposium in Honor of Professor William R. Horsfall, Illinois Mosquito and Vector Control Association Annual Meeting, Champaign, IL, October 2000.
2. Symposium, Invited Speaker, The Public Health Pesticides Act. "Natural Products Based Insect Repellents", Annual Meeting of the American Mosquito Control Association, Atlantic City, NJ March 2000.
3. Symposium: Organized and moderated. Public Health Pesticides: A global Perspective and future course of Integrated Mosquito Management. XXI International Congress of Entomology, Brazil, 2000.
4. Symposium Presentation: Integrated Mosquito Management Philosophy and Implementation, XXI International Congress of Entomology, Brazil, 2000.
5. Novak, RJ and G. Gerberg, 2002. Natural-based repellent products: Efficacy for Military versus general public use. Invited. Repellent symposium, Annual Meeting American Mosquito control Assoc., Denver, February 2002.
6. Novak, RJ. J. Shililu, J. Githurie, C Mbogo, G Brantly, J Beier, R Fusco. Larval ecology and control to manage malaria in Eritrea. Annual Meeting American Mosquito control Assoc., Denver, February 2002.
7. Novak, RJ. Vector and Pest Biology and Control. License for Environmental Health Practitioners Review course, sponsored by the Illinois Environmental Health Association. Two 3 hr Lectures In Evanston, IL March 2001, Springfield, January 2002.
8. Novak, Integrated Pest Management of Public health Importance. IPM course invited by Larry Hanks.
9. Novak, RJ. Integrate mosquito management: philosophy and application. Invited by the city of Carbondale, Illinois, August 2001.
10. Novak, RJ. Mosquito-borne illness and prevention. Invited by the Piatt County Farm Bureau, Monticello, IL, April 2002.
11. Novak, RJ. West Nile virus: Surveillance and Emergency management. Invited by the Illinois Public Works Supervisors Assoc. meeting, Springfield, April 2002.
12. Novak, RJ. J. Shililu, J. Githurie, C Mbogo, G Brantly, J Beier, R Fusco, R Lampman. Efficacy of *Bacillus thuringiensis* var. *isrealensis*, *B. sphaericus*, and temephos for managing *Anopheles* larvae in Eritrea. 3<sup>rd</sup> International Conference on BioPesticides, Kuala Lumpur Malaysia, April 2002.
13. Novak, RJ. J. Shililu, J. Githurie, C Mbogo, G Brantly, J Beier, R Fusco. Impact of larval control on the transmission of malaria in treated and untreated villages in Eritrea. East African Congress of Infectious Diseases, Kampala, Uganda. April 2002.
14. Invited Lecture Campus Honors Program. Managing malaria: An expanding global threat. December 2001.
15. Novak, RJ. West Nile virus in Illinois: biology and control, Piatt County Farm Bureau meeting, April 2002. (Invited.)

16. Novak, R.J. West Nile virus in Illinois: biology and control, Champaign Public Works meeting, April 2002. (Invited.)
17. Novak, R.J. Mosquito field sampling. Howard Hughes lecture series. Univ. IL Vermillion Research site. (Invited.)
18. Novak, R.J. Proposed plan to reduce malaria in Eritrea. USAID/Environmental Health Program. Washington DC. September 2002. (Invited.)
19. Novak, R.J. West Nile virus in Illinois: biology and control. Champaign County. Hayes Center. September 2002. (Invited.)
20. Novak, R.J. West Nile virus in Illinois: biology and control. Champaign County Health Department Public meeting. Urbana, Park Inn. October 2002. (Invited.)
21. Novak, R.J. West Nile virus: A potential threat to Wild life. University of Illinois Conservation Club. October 2002. (Invited.)
22. Novak, R.J. West Nile virus: Illinois Leads the Nation. Joint Meeting of the Texas and Louisiana Mosquito Control Associations, Beaumont, TX. October 2002. (Invited.)
23. Novak, R.J. Government Positions in biology. NRES. Lecture. November 2002. (Invited.)
24. Novak, R.J. West Nile virus in Illinois: biology and control. Canton Illinois Department of Health and Public Works. Town Meeting. November 2002. (Invited.)
25. Novak, R.J. and Lampman, R.L. 2003. West Nile virus: an IPM challenge in Illinois Crop Protection Technology Conference, January 7-8, 2003. Champaign, IL.
26. Novak, R.J. West Nile virus in Illinois: biology and control. Champaign County Extension. Board meeting. December 2002. (Invited.)
27. Novak, R.J. Integrated Pest Management: A new challenge to protect wildlife. Smithsonian West Nile virus and Wildlife Workshop. Annapolis MD. February 2003. (Invited.)
28. Novak, R.J. The potential use of methylated soy oil to control mosquitoes and reduce the impact of mosquito-borne diseases. Soy Oil Workshop, Champaign. February 2003. (Invited.)
29. Novak, R.J. Alternative transmission cycles for West Nile virus. US Centers for Disease Control Annual West Nile Conference. New Orleans, LA. February 2003. (Invited.)
30. Novak, R.J. Acceptance presentation. Medal of Honor. Annual Meeting of the American Mosquito Control Association, Minneapolis, MN. March 2003.
31. Novak, R.J. Integrated Pest management to Protect Wildlife: A New challenge. Presented at the West Nile Virus and Wildlife Health Workshop, sponsored by the Smithsonian Ecological Research Center in Edgewater, MD. February 5-6, 2003. (Invited.)
32. Novak, R.J. Integrated Mosquito Management in Eritrea. Annual Review of the National Malaria Management Program, Eritrean Ministry of Health, Tessenie, Gash Barka, Eritrea. 2003. (Invited.)
33. Novak, R.J. Integrated Mosquito Management in Eritrea: Impact of Larval Control on Malaria Transmission. USAID, Environmental Health Program Workshop, Washington DC. November 2003.
34. Novak, R. J. Managing *Anopheles arabiensis* in Eritrea: An arid land model. Invited Speaker, Larval Ecology Symposium, American Society of Tropical Medicine and Hygiene, Annual meeting. Philadelphia, PA. December 2003.
35. Gu, W., R. Lampman, and R. J. Novak. Statistical estimation of infection rates of West Nile Virus in mosquitoes. Poster. American Society of Tropical Medicine and Hygiene, Annual meeting. Philadelphia, PA. December 2003.
36. Lampman, R, R. J. Novak, A. Ringia, W. Gu and N. Krasavin. West NileVirus Outbreak in Illinois. Poster. American Society of Tropical Medicine and Hygiene, Annual meeting. Philadelphia, PA. December 2003.
37. Novak, R.J. IPM West Nile Virus: Key factors to understanding the transmission cycle and management. Univ. Illinois College of Veterinary Medicine, Department of Pathobiology. 2003. (Invited.)

38. Novak, RJ. Mosquito Distribution at Spunky Bottoms, 2000-2001. The Nature Conservancy Workshop, Dickson Mounds. 2003. (Invited.)
39. Ringia, AM, RL Lampman and RJ Novak, Impact of West Nile Virus on Illinois Birds. Illinois Audubon Society, Chicago. 2003.
40. Novak, RJ. 2003. West Nile virus in Chicago. In: Symposium, Urban West Nile Virus in the US. Annual Meeting society of Vector ecology, Coeur d' Alene, ID. (Invited.)
41. Novak, RJ. 2003. Surveillance and control of West Nile Virus in Illinois. Symposium sponsored by the board of health and the Environ. & Energy Advisory Comm. of Village Oak Park IL.
42. Novak, RJ. An Integrated Pest Management approach to Protect wildlife, especially Avian species. Annual meeting of the American Ornithologists Union, University of Illinois. 2003. (Invited for the West Nile Virus Symposium.)
43. Novak, RJ. 2004. West Nile virus in Illinois. Champaign County Extension. Homer Lake. May 2004.
44. Novak, RJ. 2004. A Tale of Two Seasons: West Nile Virus in Illinois. Baylor University, Department of Biology Seminar. (Invited.)
45. Novak, RJ. 2004. West Nile virus: Natural History in Illinois. Louisiana State University, Department Entomology. March. (Invited.)
46. Novak, RJ. 2004. West Nile virus in the Upper Midwest: An Illinois Perspective. Center Medical, Agricultural and Veterinary Entomology, USDA-Gainesville, FL, April. (Invited.)
47. Novak, RJ, J. Nardi, Liping Wang. 2005. Generation of monoclonal antibodies to vertebrate albumins for the analysis of blood meals from mosquito vectors. Annual Meeting American Mosquito control Association, Vancouver, Canada. April.
48. Lampman, R., W Gu, N Krasavin, RJ Novak. 2005. Three years of WNV outbreaks in Illinois: An Entomological perspective. Annual Meeting American Mosquito control Association, Vancouver, Canada. April.
49. Beveroth, T, M Ward, A Raims, B Danner, C LaPointe and RJ Novak. 2005. Three years of WNV outbreaks in Illinois: An Avian perspective. Annual Meeting American Mosquito control Association, Vancouver, Canada. April.
50. Novak, RJ. 2005. Malaria Studies at the Medical Entomology Lab, INHS. Center Medical, Agricultural and Veterinary Entomology, USDA-Gainesville, FL, March. (Invited.)
51. Krasavin N, RL Lampman, RJ. Novak. 2005. A multiple year comparison wo methods of detecting WNV in mosquito pools. Annual Meeting American Mosquito control Association, Vancouver, Canada. April.
52. Novak, RJ. 2005. Malaria Studies at the Medical Entomology Lab, INHS. Texas A&M, Department of Entomology, Departmental Seminar. September. (Invited.)
53. Novak, RJ. 2005. Integrated Vector Management: It's Ecology? Symposium: Innovations in biology Control and Environmental Management. International Congress of Vector Ecology. Reno, Nevada. October.
54. Novak, RJ. 2005. Malaria studies at the Medical Entomology Lab, INHS: Landscapes, seasonal and temporal dynamics in transmission and control. Yale University, College of Medicine, School of Public Health. October. (Invited.)
55. Novak, RJ, 2005. An Overview of mosquito research at the Illinois Natural History Survey. Annual Meeting Illinois Mosquito and Vector control Association. Springfield, IL. November.
56. Novak, RJ. 2005. Larval control in action: A review of current projects of intervention and a future Perspective. Symposium: From aquatic habitats of anopheline mosquitoes to the disease burden of malaria: Larval interventions from the habitat perspective. Annual Meeting American Association of Tropical Medicine and Hygiene. Washington, DC, December. (Organizer/Moderator with W. Gu.)
57. Novak, RJ. 2005. Malaria studies at the Medical Entomology Lab, INHS: Investigations in Eritrea and Kenya. University of Oklahoma School of Public Health. December. (Invited.)

58. Novak, RJ. 2005. Current status of the Village Pilot Program in Eritrea. Workshop sponsored by USAID, Washington, DC. December.
59. Novak, RJ. 2005. The impact of mosquito management on the transmission of malaria in East Africa. University of Illinois College of Medicine, Department of Biomedical Studies Seminar. (Invited.)
60. Novak, RJ, RL Lampman, W Gu, M Ward. 2006 The Biology of West Nile Virus in Illinois. Annual Meeting American Mosquito Control Association, Detroit MI. February.
61. Novak, RJ. 2006. Malaria Studies at the Medical Entomology Lab, INHS. Center Medical, Agricultural and Veterinary Entomology, USDA-Gainesville, FL, March. (Invited).
62. Novak, RJ. 2006. The Ecology and Management of malaria employing Integrated Malaria Management Strategies. University Alabama-Birmingham, College of Medicine, Division Geographic Medicine. Divisional Seminar. February. (Invited).
63. Novak, RJ. 2006. Integrated Pest Management and it utility for Mosquito and Vector Control. Keynote Address at the 3<sup>rd</sup> Annual Arbovirus Surveillance and Mosquito Control Workshop, St Augustine, FL. March.
64. Novak, RJ. 2006. Current status of research on the larval ecology and control of anopheline mosquitoes in irrigated agro-ecosystems. Integrated Vector management Workshop sponsored by the Bill and Melinda Gates Foundation, Durham, England. March.
65. Novak, RJ. 2006. Philosophy and application of Integrated Vector Management in a Rice land ecosystem. Workshop sponsored by the International Centre Insect Physiology and Ecology, Nairobi, Kenya. May.

#### **Congress/Symposium Organization**

- First International Congress on Dengue, San Juan, Puerto Rico. 1984.
- Wet-land Symposium.1990 Meeting Illinois Mosquito Vector Control Association.
- Waste tire legislation.1990 Meeting Illinois Mosquito Vector Control Association.
- Waste tire legislation and Medical Entomology. Annual Meeting of the American Mosquito Control Association.1992. Corpus Christi, Texas.
- Wetlands Symposium. Annual Meeting of the Ohio Mosquito Control Association.1992. Mentor, Ohio.
- Program Symposium: Wetland Reclamation, Animal Welfare, Human Health Protection and Integrated mosquito management. Annual Meeting of the Entomological Society America, Dallas, TX. 1994.
- Mosquito Producing Wetlands, Symposium, Annual Meeting of the American Mosquito Control Association. Portland, OR, 1995.
- Pyrethroid Stewardship Workshop, Woodcliff Lake, New Jersey. 1996.
- Bacillus sphaericus* a new insecticide to control mosquitoes. Annual Meeting of the American Mosquito Control Association. Salt Lake City, UT. 1997.
- Symposium: Pytheroids. Annual Meeting of the American Mosquito Control Association, Sparks, NV. 1998.
- Public Health Pesticides: A Global Perspective and Future Course of Integrated Mosquito Management. Robert J. Novak and Wayne Rowley. XXI Congress of Entomology, Brazil. 2000.
- Symposium: From aquatic habitats of anopheline mosquitoes to the disease burden of malaria: Larval interventions from the habitat perspective. RJ Novak and W Gu. Annual Meeting American Association of Tropical Medicine and Hygiene. Washington, DC, December.
- 5<sup>th</sup> International Congress of Vector Ecology. *Scientific Program Chair and Executive Board Member*, Antalya, Turkey.
- Symposium organizer with Tongyan Zhao. Vector Biology and Control in China. 5<sup>th</sup> International Congress of Vector Ecology, Antalya, Turkey.

#### **Students :**

##### **Graduate Students**

University of South Florida

Ryan Tokarz

Emily Schwartz  
Samia Mckeever

University of Alabama at Birmingham

Dennis Otali, PhD Thesis Advisor, Dept. of Biology 2007- date  
Chang-Hyun Kim, PhD Thesis Advisor, Dept. of Microbiology 2007-2009  
Joel Morris, PhD Thesis Advisor, Dept. Biology 2005- date  
Eric Caamano, PhD/MPH Thesis Advisor, Dept Biology &MPH advisor School Public Hlth. 2007 - date  
Samuel Levin, DRPH Advisor, Dept Epidemiology School Public Hlth. 2007-2011.

University of Illinois

Joel Morris, MS Thesis advisor, Dept Ent. 2006-2007.  
Ephantus Juma Muturi, PhD Thesis advisor, Dept. Ent., 2005 – 2007.  
Jose Funes, MS Research Advisor, Dept. Geography, 2005-present.  
Joseph Mwangangi, PhD Research Committee, Kenyatta Univ, Kenya. 2002- 2007.  
John Kane, MS Advisor, Dept Entomology, 2003 – 2006.  
Patrick Halbig, PhD Thesis advisor, Dept. Entomology, 2002 – 2006.  
Sarah Yaremych, MS Advisor, Dept. NRES, 2002 –2003.  
Jennifer Wise, MS Advisor, Dept. NRES, 2002 – 2004.  
Jennifer Chestnut, MS Thesis advisor, Dept. NRES, 2000 – 2003.  
Hillary Lee, MD/Ph.D Thesis advisor, Dept. Entomology, 1994 – 2000.  
Karen McLellan, Ph.D. Thesis advisor, Dept. Entomology, 1992- 1998.  
Michael Slameka, MS Thesis advisor, Dept. Entomology, 1997-2000.  
Daniel Howe, Ph.D. thesis and prelim. Committee College Veterinary Medicine, Purdue University, Department of Pathobiology. 1989 –1992.  
Karen Readell, Ph.D. thesis and prelim. Committee, Department of Plant Science. 1989 – 1993.  
Kevin Silver, PhD. Thesis and prelim. Committee, College Veterinary Medicine Department Bioscience. 1990 - 1992.

**Undergraduate**

University of Illinois

Matt Meador, Howard Hughes Fellowship. 1998- 2000  
Emmalee Kennedy, Chancellor's Honor's Program, 1995 to date.  
Eveline Ontivaros, Chancellor's Honor's Program, 1993 to date.  
Khiser, Hussan, Campus Honors Program, 1994 to date.  
Shalie Putman, Howard Hughes/McNair Fellowship, 1996 to date  
Brandy Howard, Howard Hughes/McNair Fellowship, 1994-96.  
Timothy Shaub, Howard Hughes Fellowship, 1994 to date.  
Barbara R. Barrido (Undergrad) University of Illinois 1992.  
Joanne Johnson (Undergrad) University of Illinois 1992.

**Post-Doctoral/Research Scientists:**

Ward, Michael, PhD. Avian Ecology and Behavior, INHS 2004- to 2006.  
Osee Sanogo, PhD.,Molecular Biology, INHS. 2004-to 2006.  
Benjamin Jacob, PhD. GPS/Remote Sensing. INHS, 2004 – to 2006.  
Aurelio Briones, PhD. Microbial Ecology, Civil Engineering. 2003 – 2005.  
Josephat Shililu, PhD. Mosquito Ecology. ICIPE. 2002 – 2006.  
Weidong Gu, Ph.D. Insect models-GIS, Illinois Natural History Survey 2002-06.  
Richard Lampman, Ph.D., Chemical Ecology/Toxicology, Illinois Natural History Survey, 1989-2006.  
Truls Jensen, Ph.D., Mosquito Ecology, Illinois Natural History Survey 1997 to 1999.  
Joel Siegel, Ph.D., Insect Pathology, Illinois Natural History Survey, 1989-1997.  
Michael H. Vodkin, Ph.D. Molecular biology/genetics, Illinois Natural History Survey. 1992 - 2000.  
Scott Hanson, Ph.D. Ecology and Behavior, Illinois Natural History Survey, 1993-1996.  
Mary Ann Koll, Ph.D. Molecular diagnostics, University of Illinois-Chicago, School of Public Health and The Chicago Department of Health. 1992- 1995.

Bruce Steinly, Ph.D., Ecology and Control, Illinois Natural History Survey, 1990- 1993.

**Professional Societies:**

Entomological Society of America  
American Mosquito Control Association  
American Society of Tropical Medicine and Hygiene  
American Association Advancement of Science  
Society of Vector Ecologists  
Illinois Mosquito and Vector Control Association  
Texas Mosquito Control Association  
Louisiana Mosquito Control Association  
Utah Mosquito Control Association

**Honor Societies:**

Sigma Xi, The Scientific Research Society of America, University of Illinois Chapter.  
Phi Kappa Phi Honor Society  
Fellow AAAS

**Professional Services:**

**Reviewer publications**

Journal of the American Mosquito Control Association  
Journal of Medical Entomology  
Journal of the American Society of Tropical Medicine Hygiene  
Canadian Entomologist  
Bulletin Entomological Research  
Environmental Entomology  
Technical Bulletins Pan-American Health Organization

**Reviewer research grants**

National Institutes of Health/NIAID  
National Science Foundation  
Department of Defense  
World Health Organization/PAHO

**Teaching Experience University (Courses):**

University of Utah (TA): General biology, Invertebrate Zoology, Advance Invertebrate Zoology, Parasitology, Aquatic Entomology, Medical Entomology, Mosquito systematics.  
University of California, Los Angeles (TA): General Entomology, Insect taxonomy, General Genetics.  
Purdue University-Westville: General Entomology  
University of Puerto Rico College of Medicine. Epidemiology, Vector Ecology/Genetics.  
University of Illinois, Department of Entomology. Medical Entomology  
University of Illinois, Dept. Vet-Pathobology. Emerging Infections.  
University Alabama at Birmingham, School of Public Health and Department of Biology, Ecology and epidemiology of arthropod-borne diseases.  
University Alabama at Birmingham, School of Medicine, M1-M2 lectures Vector-borne diseases

**Extension:**

Illinois with Illinois Natural History Survey (Cook, St. Claire, Kane, DuPage, Madison, Kankakee Counties, Tazwell, Peoria, Southern Seven County Health District, City of Chicago).  
United States with the Center for Disease Control training and disease surveillance programs.

**International Experience by Country:**

Puerto Rico, Department of Health  
U. S. Virgin Islands. Biology and Control of *Aedes aegypti*. 1983-1984.  
International; Biology and control of vector-borne diseases.  
Mexico  
Guatemala

Honduras  
St. Kitts/Nevis  
St. Vincent  
Dominica  
Martinique, with the Pasteur Institute  
Guadeloupe, with the Pasteur Institute  
French and Dutch St. Martin  
Anguilla  
British Virgin Islands  
South Africa  
China with the Chinese Academy of Sciences  
Kenya with International Centre Insect Physiology Ecology (ICIPE)  
Tanzania with ICIPE  
Eritrea  
Uganda  
Ethiopia  
Zambia  
Peru