

CURRICULUM VITAE

Richard Jay Pollack

32 Crescent Road
Needham, Massachusetts 02494

pollack@bu.edu
rpollack@hsph.harvard.edu
rich@identify.us.com

January 2011

DATE AND PLACE OF BIRTH February 4, 1957 in Cincinnati, Ohio

EDUCATION

<u>Date</u>	<u>Discipline</u>	<u>Degree</u>	<u>Institution</u>
1988	Parasitology	Ph.D.	University of Pennsylvania
1980	Medical Parasitology	M.Sc., DLSHTM	London School of Hygiene & Tropical Medicine (University of London)
1979	Entomology	B.S.	Cornell University

ACADEMIC APPOINTMENTS

<u>Date</u>	<u>Title</u>	<u>Department</u>	<u>Institution</u>
2010-	Research Associate Professor	Biology	Boston University
2009-	Adjunct Assistant Professor	Biomedical Sciences	Cummings School of Veterinary Medicine, Tufts University
1997-	Instructor / Research Assoc.	Immunology & Infectious Diseases	Harvard School of Public Health
1996-97	Instructor	Tropical Public Health	Harvard School of Public Health
1991-96	Research Assoc.	Tropical Public Health	Harvard School of Public Health
1989-97	Tutor in Biology	Div of Biological Sciences	Harvard University
1988-91	Research Fellow	Tropical Public Health	Harvard School of Public Health

OTHER ACADEMIC POSITIONS AND MAJOR VISITING APPOINTMENTS

<u>Date</u>	<u>Title</u>	<u>Department</u>	<u>Institution</u>
2010	Consultant	African Studies	Boston University
1989	Visiting Scientist	Division of Comparative Medicine	Massachusetts Inst. of Technology
1983-88	Graduate Research Fellow	Pathobiology	U. of Pennsylvania
1981-82	Senior Research Assistant	Microbiology & Public Health	Michigan St. Univ.
1980-81	Res. Support Specialist II	Entomology	Cornell University
1976-79	Research Assistant	Entomology	Cornell University

MAJOR AWARDS (selected)

Co-Principal Investigator 2007-2011 Rockefeller Foundation (Legacy Award 2010)
 "Effect of Maize Culture on Malaria Transmission"

Principal Investigator 1997-1999 Centers for Disease Control and Prevention
 "An Integrated GIS and Database Management System for Monitoring and Forecasting
 Arbovirus Epidemiology" SBIR Phase II subcontract

Co-Principal Investigator 1994-2001 USAID, Middle East Regional Cooperative Research
 "Environmental Solutions to Problems Cause by Arthropods of Public Health Importance in
 the Jordan River Valley and the Gaza Strip"

Principal Investigator 1995-1998 Evelyn Lilly Lutz Foundation, Beverly, MA
 "Roosting Behavior of Birds and Encephalitis Risk in Northern Massachusetts"

Principal Investigator 1994-1995 Centers for Disease Control and Prevention
 "An Integrated GIS and Database Management System for Monitoring and Forecasting
 Arbovirus Epidemiology" SBIR Phase I subcontract

Principal Investigator 1993-1998 Centers for Disease Control and Prevention
 "CDC Cooperative Agreement "Community-based monitoring of Lyme disease risk"

Principal Investigator 1992-1993 Evelyn Lilly Lutz Foundation, Beverly, MA
 "Lyme disease surveillance project for North Shore Massachusetts communities"

PATENTS

"Control of Insect Pests" U.S. Patent 5,484,599 issued 16 January 1996.

MAJOR PROFESSIONAL SERVICE & HONORS

President, IdentifyUS LLC Diagnostic Service 2010-
Chair, Science and Technology Committee, American Mosquito Control Association, 2008-10
Chair, Mosquito Advisory Group, Massachusetts Dept. Agricultural Resources, 2006-
Major Consultant and Contributor, Suffolk County Vector Control and Wetlands Management
Long-Term Plan; Entomological/epidemiological review, 2004-05
Chair, Working Group on Pesticide Risk, MA Dept. Public Health, 2000-01
Commissioner, Norfolk Co. (MA) Mosquito Control Project, 2002- (Chair 2003-04, 08-09)
Scientific Advisory Council, Harvard Center for Public Health Preparedness 2002-
National Instit. Health, Center for Scientific Review, Special Emphasis Panel, Bioterrorism
2002-03; SBIR panel 2006
Tick-borne Disease Advisory Committee, MA Dept Public Health, 2000-
Mosquito Control Advisory Committee, Board of Health, Needham, MA 1992-
Stauber Award, The New Jersey Society for Parasitology, 1987

SERVICE / EXTENSION (selected)

Entomological & parasitological identification service, Harvard School of Public Health,
founded and managed program (1989- 2010); IdentifyUS LLC (2010-) serving hospitals,
clinical laboratories, state public health laboratories, health departments and private citizens.

Mail and package inspection and decontamination program, Harvard University. Developed
protocols and processed suspect deliverables for the entire university following the 2001
USPS anthrax incidents.

Select Agent laboratory, Harvard School of Public Health. 2001-2005. Designed, provided
oversight during construction, facilitated federal certification and supervised studies within
the first Select Agent laboratory facility at Harvard University.

Media information source. Harvard School of Public Health and Harvard University 1988-2010.
Responded to media requests frequently referred by Harvard communications officers.

REVIEW/EDITORIAL SERVICE (selected)

Harvard Health Publications / IntelliHealth (Contributing Editor)
New England Journal of Medicine
US Department of Agriculture
US Federal Trade Commission (Consultant)
Proceedings of the National Academy of Sciences
Journal of the American Medical Association
Emerging Infectious Diseases
World Health Organization
Mayo Clinic Proceedings
Archives of Dermatology
Pediatrics
Consumer Reports
National Geographic Society

American Journal of Tropical Medicine and Hygiene
Entomological Society of America
PLoS

CONSULTANTSHIPS

Evaluation and research services for diverse pharmaceutical, chemical, food and hospitality industries as well as for federal, state and local agencies.

Expert witness in diverse legal cases pertaining to insect and tick infestations.

PROFESSIONAL SOCIETIES (current and former)

American Society of Tropical Medicine and Hygiene
American Society of Parasitologists
American Mosquito Control Association
American Society of Mammalogists
Entomological Society of America
Royal Society of Tropical Medicine and Hygiene (Fellow)
Royal Entomological Society of London (Fellow)
Society for Vector Ecology

FIELD RESEARCH EXPERIENCE (selected)

1977-80 Ithaca, NY. Ecology and systematics of black flies.
1981 Liberia. Ecology of black fly vectors of human onchocerciasis.
1982-83 Sudan. Ecology and epidemiology of onchocerciasis in savanna and forest areas.
1983-88 Philadelphia, PA. Epidemiology of bovine onchocerciasis.
1988-present. Massachusetts. Epidemiology and control of Lyme disease and other tick-borne infections
1989-present. Massachusetts. Ecology of mosquito vectors and avian reservoirs of Eastern equine encephalitis virus.
1994-2001. Jordan, Gaza and Israel. Ecology and dispersal dynamics of house flies and mosquitoes in the Jordan Rift Valley and Gaza.
1996-present. US & abroad. Epidemiology and control of human louse infestations.
1999-present Massachusetts. Ecology of mosquito vectors and avian reservoirs of West Nile virus, and assessment of interventions.
2005-present Ethiopia. Associations between intensified maize cultivation, mosquito population dynamics and malaria incidence

TEACHING EXPERIENCE

<u>Date</u>	<u>Course</u>	<u>Institution & course title</u>	<u>Role</u>
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2010	PH825	Boston University School of Public Health <i>Role of Human & Environmental Factors in Emerging & Re-emerging Infectious Diseases</i>	Presenter
2010	IMI 232	Harvard School of Public Health <i>Vector-borne & Zoonotic Diseases</i>	Instructor
2007-2010	ID201a	Harvard School of Public Health <i>Ecology, Epidemiology, and Control of Important Parasitic Diseases of Developing Countries</i>	Presenter
2007-2010	EH201	Harvard School of Public Health <i>Introduction to Environmental Health</i>	Discussant
2002-2005	PIH 301 C	Harvard School of Public Health <i>Public Health Response to Chemical and Biological Terrorism</i>	Presenter
1990-2006	ID201cd	Harvard School of Public Health <i>Biology, Epidemiology, Economics and Policy: Malaria (Malaria and Human Affairs)</i>	Lecturer & Coordinator
1989-2010	TPH206d/IMI206	Harvard School of Public Health <i>Principles of Public Health Entomology</i>	Lecturer & Coordinator
1989-1997	Bio99hf	Harvard University <i>Uninvited Guests: An assessment of significant insect invasions into the Americas</i>	Developer & Director
1979	Entomology 212	Cornell University <i>Insect Biology</i>	Lab section director
1978	Entomology 471	Cornell University <i>Bionomics of Freshwater Invertebrates</i>	Lab section director

BIBLIOGRAPHY

Original reports

1. Cupp EW, Lok JB, Bernardo MJ, Brenner RJ, **Pollack R.J**, Scoles GA. Complete generation rearing of Simulium damnosum s.l. (Diptera: Simuliidae) in the laboratory. Tropenmedizin und Parasitologie 1981; 32:119-122.
2. Lok JB, Cupp, EW, Bernardo MJ, **Pollack R.J**. Further studies on the development of Onchocerca spp. (Nematoda: Filarioidea) in nearctic black flies (Diptera: Simuliidae). Am J Trop Med Hyg. 1983; 32(6):1298-1305.

3. Lok JB, **Pollack RJ**, Cupp EW, Bernardo MJ, Donnelly JJ, Albiez EJ. Development of Onchocerca lienalis and O. volvulus from the third to fourth larval stage *in vitro*. Tropenmedizin und Parasitologie 1984; 35:209-211.
4. Lok JB, **Pollack RJ**, Donnelly JJ. Studies of the growth-regulating effects of Ivermectin on larval Onchocerca lienalis *in vitro*. J Parasitol. 1987; 73(1):80-84.
5. **Pollack RJ**, Lok JB, Donnelly JJ. Analysis of glutathione-enhanced differentiation by microfilariae of Onchocerca lienalis (Filarioidea: Onchocercidae) *in vitro*. J Parasitol. 1988; 74(3):353-359.
6. **Pollack RJ**, Telford SR III, Spielman A. Rectal infusion and aspiration of material through the guts of ixodid ticks (Acari: Ixodidae). J Med Entomol. 1991; 28(6):809-815.
7. Shih CM, **Pollack RJ**, Telford SR III, Spielman A. Delayed dissemination of Lyme disease spirochetes from the site of deposition in the skin of mice. J Infect Dis. 1992; 166:827-831.
8. Krause PJ, Telford SR III, **Pollack RJ**, Ryan R, Brassard P, Zemel L, Spielman A. Babesiosis: An underdiagnosed disease of children. Pediatrics. 1992; 89(6):1045-1048.
9. Yoder JA, **Pollack RJ**, Spielman A, Sonenshine DE, Johnston DE. Secretion of squalene by ticks. J. Insect Physiol. 1993; 39(4):291-296.
10. Yoder JA, **Pollack RJ**, Spielman A. An ant-diversionary secretion of ticks: First demonstration of an acarine allomone. J. Insect Physiol. 1993;39(5):429-435.
11. **Pollack RJ**, Telford SR III, Spielman A. Standardization of medium for culturing Lyme disease spirochetes. J. Clin. Microbiol. 1993; 31(5):1251-1255.
12. Shih CM, Telford SR III, **Pollack RJ**, Spielman A. Rapid dissemination by the agent of Lyme disease in hosts that permit fulminating infection. Infect. Immun. 1993; 61(6):2396-2399.
13. **Pollack RJ**, Komaroff AL, Telford SR III, Gleit M, Fagioli L, Rosa Brunet L, Spielman A. 1995. Borrelia burgdorferi infection is rarely found in patients with chronic fatigue syndrome. Clin. Infect. Dis. 20:467-468.
14. Komar N, **Pollack RJ**, Werner B, Timperi R, Spielman A. 1995. A nestable fiber pot for sampling resting mosquitoes. J. Am. Mosq. Control Assoc. 11(4):463-467.
15. Krause PJ, Telford S III, Spielman A, Sikand VJ, Ryan R, Christianson D, Burke G, Brassard P, **Pollack RJ**, Peck J, Persing D. Concurrent Lyme Disease and Babesiosis. 1996. Evidence for Increased Severity and Duration of Illness. J. Am. Med. Assoc. 275(21):1657-1660.
16. Turell MJ, **Pollack RJ**, Spielman A. 1997. Enema infusion technique inappropriate for evaluating viral competence of ticks. J. Med. Entomol.. 34(3):298-300.

17. Krause PJ, Spielman A, Telford SR III, Sikand VK, McKay, K, Christianson D, **Pollack RJ**, Brassard P, Magera J, Ryan R, Persing DH. 1998. Persistent parasitemia after acute babesiosis. *New Engl J Med* 339(3):160-5.
18. Finlay GA, Brown JS, Marcus LC, **Pollack RJ**. 1999. Nasal myiasis - A "Noso"comial infection. *Infect Dis Clin Prac.* 8:218-220.
19. **Pollack RJ**, Kiszewski A, Armstrong P, Hahn C, Wolfe N, Rahman HA, Laserson K, Telford III SR, Spielman A. 1999. Differential permethrin susceptibility of head lice sampled in the US and Borneo. *Arch Ped Adolesc Med.* 153:969-973.
20. Hodgson, JC, Spielman A, Komar N, Krahforst CF, Wallace GT, **Pollack RJ**. 2001. Interrupted feeding by *Culiseta melanura* (Diptera: Culicidae) on European Starlings. *J. Med. Entomol.* 38(1):59-66.
21. **Pollack RJ**, Kiszewski A., Spielman A. 2000. Overdiagnosis and consequent mismanagement of head louse infestations in North America. *Ped Inf Dis J.* 19:689-93.
22. Ye-ebiyo Y, **Pollack RJ**, Spielman A. 2001. Enhanced development in nature of larval *Anopheles arabiensis* feeding on maize pollen. *Am J Trop Med Hyg.* 63:90-93.
23. **Pollack RJ** 2001. Head Lice Infestation: Single drug versus combination therapy. *Letter. Pediatrics* 108(6):1393.
24. **Pollack RJ**, Kiszewski A., Spielman A. 2002. Repelling mosquitoes. *N.E.J.M.* July 4. (invited Perspectives commentary)
25. Ye-ebiyo Y, **Pollack RJ**, Kiszewski A, Spielman A. 2003. Enhancement of development of larval *Anopheles arabiensis* by proximity to flowering maize (*Zea mays*) in turbid water and when crowded. *Am J Trop Med Hyg.* 68(6):748-752.
26. Pedra JHF, Brandt A, Li H-M, Westerman R, Romero-Severson J, **Pollack RJ**, Murdock LL, Pittendrigh BR 2003. Transcriptome identification of putative genes involved in protein catabolism and innate immune response in human body louse (Pediculidae: *Pediculus humanus*). *Insect Biochemistry and Molecular Biology* 33 (11), 1135-1143. 2003
27. Ye-ebiyo Y, **Pollack RJ**, Kiszewski A, Spielman A. 2003. A component of maize pollen that stimulates larval mosquitoes (Diptera: Culicidae) to feed and increases toxicity of microbial larvicides. *J. Med. Entomol.* 40(6):860-64.
28. Spielman A, TG Andreadis , CS Apperson , AJ Cornel, JF Day, JD Edman, D Fish, LC Harrington, AE Kiszewski , R Lampman, GC Lanzaro, FR Matuschka, LE Munstermann, RS Nasci DE Norris, RJ Novak, **RJ Pollack**, WK Reisen, P Reiter, HM Savage, WJ Tabachnick WJ and DM Wesson. 2004. Outbreak of West Nile virus in North America. *Science* 306: 1473-1475.
29. Lepore TJ, **Pollack RJ**, Spielman A, Reiter P. 2005. A modified inexpensive Lard Can trap for sampling host-seeking mosquitoes. *J Am Mosq Control Assoc.* 20(3):321-2.

30. Burke G, Wikel SK, Spielman A, Telford SR, McKay K, Krause PJ, **Pollack R**, Tahan S, Tomas P, Christianson D, Rajan TV, Ryan R, Dias F, Fall P, Urso T, Abreu C, Covault J., Baute P, Closter L, Miller J. 2005. Hypersensitivity to ticks and Lyme disease risk. *Emerg. Infect Dis.* 11(1): <http://www.cdc.gov/ncidod/EID/vol11no01/04-0303.htm>
31. Reddy MR, Lepore TJ, **Pollack RJ**, Kiszewski AE, Spielman A, Reiter P. 2007. Early evening questing and oviposition activity by the *Culex* (Diptera: Culicidae) vectors of West Nile virus in northeastern North America. *J. Med. Entomol.* 44(2):211-214.
32. Gunawardena S, Karunaweera ND, Ferreira MU, Phone-Kyaw M, **Pollack RJ**, Alifrangis M, Rajakaruna R, Konradsen F, Amerasinghe P, Galappaththy G, Hartl DH, Wirth DF. 2010. Geographic structure of *Plasmodium vivax*: microsatellite analysis of parasite populations from Sri Lanka, Myanmar and Ethiopia. *Am J Trop Med Hyg.* 82(2):235-242.

Books and monographs

1. **Pollack RJ**. Analysis of glutathione-enhanced differentiation by microfilariae of *Onchocerca lienalis* (Nematoda: Filarioidea) *in vitro*. Doctoral dissertation. University of Pennsylvania, Philadelphia, PA, 1988.

Reviews

1. Telford SR III, **Pollack RJ**, Spielman A. Emerging Vector-Borne Infections. *Infectious Disease Clinics of North America*. 1991; 5(1):7-17.
2. Spielman A, U Kitron, **Pollack RJ**. Time limitation and the role of research in the world-wide attempt to eradicate malaria. *J. Med Entomol* 1993; 30(1):6-19.
3. Spielman A, SR Telford III, **Pollack RJ**. The origins and course of the outbreak of Lyme disease. In: Ginsberg H, ed. *Ecology and Environmental Management of Lyme Disease*. Rutgers University Press, 1993.
4. Jones D, **Pollack RJ**. Human lice. In: Pimentel D, ed. *Encyclopedia of Pest Management*. Marcel Dekker, New York. 2002
5. Spielman A. **Pollack RJ**, Kiszewski AE, Telford SR III. Issues in public health entomology. *Vector Borne Zoonotic Dis.* 2001: 1:3-19.
6. Krause PJ, **Pollack RJ**, Closter L, Christianson D, Spielman A. Lyme disease, babesiosis, and human granulocytic ehrlichiosis on Block Island: A review. In: Paton PW et al, ed. *The Ecology of Block Island*. Rhode Island Natural History Survey, Kingston, RI. 2002: 209-215.
7. Maguire J, **Pollack RJ**, Spielman A. Ectoparasitic infestations. In: Braunwald E. et al., ed. *Harrison's Principles of Internal Medicine*, 16th ed. McGraw Hill Medical Pub. 2004: 2600-2607.; 17th ed. 2008.

8. Spielman A, Wachtel M, **Pollack RJ**. Arthropods. In: Gorbach SL et al., ed. *Infectious Diseases*, 3rd ed. Lippincott Williams & Wilkins, Philadelphia, PA. 2004; 2401-2414.
9. **Pollack RJ**, Marcus L. A travel medicine guide to arthropods of medical importance. *Infectious Disease Clinics of North America*. 2005;19(1):169-183.
10. **Pollack RJ**. Ectoparasitic infestations. In: Braunwald E. et al., ed. *Harrison's Principles of Internal Medicine*, 18th ed. McGraw Hill Medical Pub. 2010. (in press)

Miscellaneous literature

1. Hansen, RC and the Working Group on the Treatment of Resistant Pediculosis (Brogdon WG, Dillenberg J, Gittes J, **Pollack RJ**, Poundstone J, Robinson J, Skelton JB, Spielman A, Taplin D, Villar ME). Guidelines for the treatment of resistant pediculosis. *Contemporary Pediatrics* (supplement). 2000.
2. Burgess, IA, **Pollack RJ**, Taplin D. Cutting through controversy: Special report on the treatment of head lice. Postgraduate Institute for Medicine (Englewood, CO), CME program 809-999-03-024-H01) 2003.
3. Spielman A, Weerasuriya S, Malaney P, Kiszewski A, Willis D, **Pollack R**, Teklehaimanot A. Industrial anti-malaria policies. Commissioned document by the Global Health Initiative of the World Economic Forum, distributed at the World Economic Forum. 2002.
4. **Pollack RJ**. The role of the school in battling head lice. *OurChildren* (The National PTA Magazine; invited column). 2007 Apr/May.
http://www.pta.org/pr_magazine_issue_details_1177615092781.html
5. **Pollack RJ**. Bed bugs. Invited Op/Ed. *New York Times* 23 August 2009.
<http://roomfordebate.blogs.nytimes.com/2009/08/23/bedbugs-itch-itch-scratch-scratch/>

INTERNET SITES

IdentifyUS LLC. Informational resources and service sites:

<http://identify.us.com>

Harvard web sites (1997-2010) on diagnosis and management of human lice, bed bugs and ticks:

<http://www.hsph.harvard.edu/headlice.html>

<http://www.hsph.harvard.edu/bedbugs/>

http://www.hsph.harvard.edu/pdf/tick_evaluation.pdf

Invited contributor to: InteliHealth, WebMD, and UpToDate medical informational web sites.