

CURRICULUM VITAE[PRIVATE]

NAME: James Wayne Le Duc (aka: J.W. LeDuc)

552.117

PRESENT POSITION AND ADDRESS:

Professor, Microbiology and Immunology
John Sealy Distinguished University Chair in Tropical and
Emerging Virology
Director, Galveston National Laboratory
University of Texas Medical Branch
Galveston, Texas 77555-0610

Home Address:

Citizenship:

United States of America

Marital Status:

Children:

EDUCATION:

17 June 1977

Ph.D. Epidemiology
School of Public Health
University of California, Los Angeles, CA

8 Dec 1972

M.S.P.H. Infectious and Tropical Diseases
School of Public Health
University of California, Los Angeles, CA

8 Sept 1967

B.S. Zoology
California State University, Long Beach, CA

PROFESSIONAL WORK HISTORY:

3/2010-present

Director, Galveston National Laboratory
University of Texas Medical Branch
Galveston, TX

10/2013 – present

Professor, Microbiology and Immunology
John Sealy Distinguished Chair in Tropical Emerging Virology
University of Texas Medical Branch

12/2006 – 10/2013

Professor, Microbiology and Immunology
Robert E. Shope MD and John S. Dunn Distinguished Chair in
Global Health

11/2005-12/2006

Coordinator for Influenza
Coordinating Center for Infectious Diseases
Centers for Disease Control and Prevention
Atlanta, GA

2/2000-11/2005	Director Division of Viral and Rickettsial Diseases National Center for Infectious Diseases Centers for Disease Control and Prevention Atlanta, GA
1996-2000	Associate Director for Global Health National Center for Infectious Diseases Centers for Disease Control and Prevention Atlanta, Georgia, USA
1992-1996	Epidemiologist (CDC) and Medical Officer (WHO) World Health Organization Geneva, Switzerland (Seconded from CDC)
1969-1992	Officer, US Army Medical Research and Development Command, Medical Service Corps
1987-1992	Scientific Adviser Gorgas Memorial Institute of Tropical and Preventive Medicine
1987-1992	Associate Department of Immunology and Infectious Diseases The Johns Hopkins University School of Hygiene and Public Health Baltimore, Maryland
1984-1992	Adjunct Associate Professor Uniformed Services University of Health Sciences Bethesda, Maryland
1984-1992	Adjunct Faculty Hood College Frederick, Maryland
1982-1992	Postdoctoral Research Advisor National Research Council, National Academy of Science
1980	Adjunct Faculty The University of Texas, School of Public Health Health Science Center at Houston Houston, Texas
1976	Associate Instructor Division of Community and Environmental Medicine College of Medicine, University of California Irvine, CA
1975	Teaching Assistant Epidemiology Division, School of Public Health University of California, Los Angeles, CA

1967-1969 Smithsonian Institution
African Mammal Project
Medical Entomologist and Team Leader
IVORY COAST, TOGO and DAHOMEY (now Benin)

MILITARY EXPERIENCE (Active Duty U.S. Army Officer, 1969-1992, Regular Army):

1992 Director, Disease Assessment Division
United States Army Medical Research Institute of Infectious
Disease
Fort Detrick, Frederick MD
Bethesda, Maryland

1981-1991 Chief, Department of Epidemiology
United States Army Medical Research Institute
of Infectious Diseases
Fort Detrick, Frederick, MD

1979-1981 Chief, Arbovirus Section, Virology Department
Gorgas Memorial Laboratory, Panama

1977-1979 Commander, United States Army Medical Research
Unit, Belem, Brazil

1975-1977 Civilian Education Program-Doctorate
University of California, Los Angeles, CA

1975 Medical Department Officer Advanced Course
Fort Sam Houston, TX

1973-1975 Principal Investigator, Ecology of Arboviruses Program
Walter Reed Army Institute of Research
Washington, DC

1971-1972 Civilian Education Program-Masters
University of California, Los Angeles, CA

1969-1971 Research Entomologist, Principal Investigator
Department of Entomology
Walter Reed Army Institute of Research
Washington, DC

1969 Medical Entomologist, Medical Service Corps, U.S. Army
Officer Basic Course and Environmental Engineering
Fort Sam Houston, TX

RESEARCH ACTIVITIES:

Area of Research

Epidemiology of infectious diseases; global health; biodefense and biosecurity; medical countermeasure development.

GRANT SUPPORT:

Current:

1. 2UC7AI094660-09, "Galveston National Laboratory Operations" 05/01/2018-04/30/2019. Budget Period \$11,500,000 (yr 3 of 5) (LeDuc PI). Project Period 05/01/2016-04/30/2021. This award provides support for the BSL4 operations of the NBL. NIH/NIAID
2. 2UC7AI094660-09, "Galveston National Laboratory Operations" 05/01/2018-04/30/2019. Supplemental funding \$1,747,004. Project period 05/01/2018-04/30/2019. This award provides support for the BSL4 operations of the NBL. NIH/NIAID.
3. NIH/NIAID Award Number HHSN2722012000031, 08/20/2012-08/19/2022. "Evaluation and Testing Services (ETS) for vaccines and other biologics for infectious diseases" (Battelle PI; UTMB subcontract; LeDuc 3.1% effort) \$2,900,000 (Task order driven). Evaluation and Testing Services for Vaccines and Other Biologics for Infectious Diseases. Provide vaccine efficacy testing in nonhuman primates at BSL4.
4. HHSO1002001500008C Award to Charles River Laboratories, subcontract 20121663 to UTMB. Trevor Brasel Study PI; Le Duc award PI for UTMB.

Pending:

None currently

Past:

S-LMAQM-05-GR-114 (LeDuc PI), 8/11/07-3/31/09 U.S. Civilian Res. & Devel. Foundation, \$56,938. The award provided support for international collaborations on biodefense.

C76HF10652-01-00 (LeDuc PI), 8/1/08-12/31/09. HRSA, \$189,677. The award provided support for the purchase of equipment.

UC7AI70083-01 to -05 (Lemon, PI to Mar 2010; LeDuc, JW onward) 05/03/06-04/30/11 \$15,000,000/year. NIH/NIAID. This award supported the Galveston National Laboratory Operations.

5UC7AI070083-05 Revised, "Galveston National Laboratory Operations," 05/01/2010-04/30/2012, \$2,003,602 (LeDuc PI). This award provided core support for the non-BSL4 operations of the NBL.

UC7AI094660-01, "Galveston National Laboratory Operations" 05/01/2011-04/30/2012, \$11,665,848 (yr 1 of 5) (LeDuc PI). This award provided support for the BSL4 operations of the NBL. NIH/NIAID.

UC7AI094660-02, "Galveston National Laboratory Operations" 05/01/2012-04/30/2013 Budget Period \$14,100,000 (yr 2 of 5) (LeDuc PI). Project Period 05/31/2011-04/30/2016. This award provides support for the BSL4 operations of the NBL. NIH/NIAID.

UC7AI094660-03, "Galveston National Laboratory Operations" 05/01/2013-04/30/2014. Budget Period \$13,500,000 (yr 3 of 5) (LeDuc PI). Project Period 05/31/2011-04/30/2016. This award provides support for the BSL4 operations of the NBL. NIH/NIAID

UC7AI094660-04, "Galveston National Laboratory Operations" 05/01/2014-04/30/2015. Budget Period \$14,000,000 (yr 4 of 5) (LeDuc PI). Project Period 05/31/2011-04/30/2016. This award provides support for the BSL4 operations of the NBL.

UC7AI094660-05, "Galveston National Laboratory Operations" 05/01/2015-04/30/2016. Budget Period \$14,856,806 (yr 5 of 5) (LeDuc PI). Project Period 05/31/2011-04/30/2016. This award provides support for the BSL4 operations of the NBL. NIH/NIAID

2UC7AI094660-06, "Galveston National Laboratory Operations" 05/01/2016-04/30/2017. Budget Period \$11,500,000 (yr 1 of 5) (LeDuc PI). Project Period 05/31/2016-04/30/2021. This award provides support for the BSL4 operations of the NBL. NIH/NIAID

2UC7AI094660-07, "Galveston National Laboratory Operations" 05/01/2017-04/30/2018. Budget Period \$11,500,000 (yr 2 of 5) (LeDuc PI). Project Period 05/31/2016-04/30/2021. This award provides support for the BSL4 operations of the NBL. NIH/NIAID

USAMRMC Award Number W81XWH-09-2-0053 entitled, "National Biocontainment Training Center (LeDuc PI) 22 May 2009 - 21 June 2014, \$5,740,000. This award supported the operations of the National Biocontainment Training Center at UTMB.

USAMRMC Award Number W81XWH1120148, 07/15/2011-07/15/2016, \$4,371,000 (LeDuc, PI). This award supports the expanded operations of the National Biocontainment Training Center at UTMB.

HHS0100201100015, 05/24/2012-04/27/2013 "Development of Anthrax viability assay" (LeDuc PI, 2% effort; Peterson Project Leader) \$384,738.00, DHHS/BARDA

HHS0100201100015I/HHSO10033002T, 09/01/2012-06/01/2013, "Development of animal model for Burkholderia" (LeDuc PI, 2% effort; Torres Project Leader) \$713,271, DHHS/BARDA

DTRA 01-03-D-0009, Subaward 798172-87M5 05/01/2013-09/30/2013. DoD/ Defense Threat Reduction Agency (LeDuc, subaward from University of New Mexico) \$54,961. Joint University Partnership Collaboration with the Biological Threat Reduction Program. Development and implementation of a science program for the CPHR in Tbilisi, Georgia in the newly constructed laboratory.

HDTRA1-11-1-0032 (Motin- PI, LeDuc-Co-I) 06/15/11- 06/14/14. Defense Threat Reduction Agency (DTRA), "Insights into Humoral Immunity to Plague" \$138,399. The goal of this project is to unravel human immune responses to a live plague vaccine. (award terminated early due to State Department freeze on collaborations with Russia)

Academic Engagement Partnership 10/01/2013-09/30/2017. DoD/ Defense Threat Reduction Agency (LeDuc, subaward PI from Metabiota) \$1,790,000 (task order driven). Academic Engagement Partnership (AEP). Deliver custom-tailored, specialized training modules to develop scientific leaders.

COMMITTEE RESPONSIBILITIES:

International:

2018-present	Member, International Advisory Committee, Wuhan, China, National Bio-safety Laboratory of the Chinese Academy of Sciences
2014-2016	Member, WHO International Health Regulations Emergency Committee for Ebola.
2013-2019	Member, Global Alert and Response Operations (GOARN) Steering Committee, World Health Organization, Geneva, Switzerland

2016	Co-chair, India-U.S. Workshop on Building Regional Capacity to Tackle Challenges of Emerging Infections and Global Health Security, Seychelles, 2016. NAS
2014	Co-chair, India-U.S. Biosafety and Biological Risk Management Workshop, New Delhi, India, November 2014. NAS
2014	Member, International Panel for the review of Life Sciences, Greece, Ministry of Education and Religious Affairs, General Secretariat for Research & Technology (GSRT)
2013-2017	Member, International Health Regulations Roster of Experts, World Health Organization, Geneva, Switzerland
2012	Chair, Search Committee for Director General, Hellenic Pasteur Institute, Athens, Greece
2012	Member, G-8 Global Partnership International Working Group
2005-2006	G-8 Summit, Russia, Member of pre-meeting USA delegation on health
2006	World Bank sponsored Pledging Conference for Pandemic Influenza Preparedness, member USA delegation, Beijing, China, January 2006
2006	Regional Pandemic Influenza Preparedness Summit, member USA delegation, Tokyo, Japan, January 2006
2003	WHO Consultation on “Needs and Opportunities for SARS Vaccine Research and Development”—Rapporteur
1997	External Reviewer for Government of Argentina and the World Bank Review \$70 million VIGIA program
1997	External Reviewer for Government of Brazil and the World Bank Review \$300 million VIGISUS program

National:

2018-2019	Member, Search Committee, Director, Integrated Research Facility, NIAID/NIH
2018	Member, NIH Institute Director Leadership Review, NIH
2016-present	Member, Board of Scientific Counselors, Infectious Disease National Center, Centers for Disease Control and Prevention
2018-present	Co-Chair for Vector-borne Diseases joint working group Office of Infectious Diseases and National Center for Environmental Health, Centers for Disease Control and Prevention
2016	Member, Search Committee, Director, Division of Microbiology and Infectious Diseases, NIAID/NIH
2014-present	Member, Texas State Task Force on Preparedness for Infectious Diseases, State of

Texas

2014-present	Member, National Science Advisory Board for Biosecurity (NSABB), National Institutes of Health
2014-2015	Member, Team B, Advisors to the Director on Ebola epidemic, Centers for Disease Control and Prevention
2013, 2017	Chair/Member, Scientific Advisory Board, Military Infectious Diseases Research Program Strategic Review, Lethal Viruses Program, (Chair 2013; member 2017)
2013	Chair, DOD Medical Research Program Peer Review, DNA Vaccine Technology for Post Exposure Prophylaxis-Hantavirus
2013	Member, Review Panel, Division of Intramural Research Director, National Institute for Allergy and Infectious Diseases, National Institutes of Health
2010-present	Member, Committee on International Security and Arms Control (CISAC), National Academy of Sciences.
2010-2013	Member, National Biosurveillance Advisory Subcommittee, Global and Regional Biosurveillance Collaborations Task Force Centers for Disease Control and Prevention
2010-2012	Member, National Advisory Board Southwest Foundation for Biomedical Research
2008-2011	Member, Board of Scientific Counselors Vaccine Research Center National Institute for Allergy and Infectious Diseases National Institutes of Health
2009	Ad Hoc Member, Board of Scientific Counselors Division of Intramural Research National Institute for Allergy and Infectious Diseases National Institutes of Health
2007-2015	Vice Chair, Science and Technology Advisory Board National Biodefense Analysis and Countermeasures Center Fort Detrick, Frederick, MD
2009-2010	Chair, Committee on Scientific Milestones for the Development of a Gene-Sequence-Based Classification System for Oversight of Select Agents National Academy of Sciences
2009	Chair, West Nile virus Program Review Panel Centers for Disease Control and Prevention, Fort Collins, CO
2008-2009	Member, Committee on Strengthening and Expanding the Department of Defense Cooperative Threat Reduction (CTR) Program, National Academy of Science
2008-present	Editorial Board, <i>Control of Communicable Diseases Manual</i> , 19 th , 20 th , 21 st Eds.
2008	Member, External Review Panel, Epidemiology and Laboratory Capacity for Infectious Diseases Cooperative Agreement program, Centers for Disease Control

and Prevention, Atlanta, GA

- 2008 Chair, Secondary Review Panel, Preparedness and Emergency Response Centers grants review, Centers for Disease Control and Prevention, Atlanta, GA
- 2005-2006 Numerous activities at CDC, national and international level involving preparedness for Pandemic Influenza
- 2006-9; 2012-present Chair, (2015-June 2018) Committee on Public Health, Public and Scientific Affairs Board, American Society of Microbiology
- 2004-2008 Steering Committee, NIH/National Institute of General Medical Sciences, MIDAS (Model of Infectious Disease Agent Study)
- 2002 NIH/NIAID Blue Ribbon Panel member of bioterrorism threat agents
- 2002-2004 Working Group on Biological Weapons Control
National Academy of Sciences
- 1996-2000 Task Force Member
Task Force on Emerging Infectious Diseases
Pan American Health Organization
- 1996-2000 Committee Member, U.S.-Russian Collaborative Program for Research and Monitoring of Pathogens of Global Importance
National Academy of Sciences
- 1991-1993 Young Investigator Award Committee and
1991-2010 Travel Awards Subcommittee (Chairman)
American Society of Tropical Medicine and Hygiene Program Committee
- 1988-1990 American Committee on Arthropod-borne Viruses
(Executive Council, 1986-1990; Chairman)

UTMB:

- 2018 Member, Search Committee for Chief of Police, UTMB
- 2013-14 Member, Search Committee for Professor and Chair, Department of Pathology
- 2013-14 Member, Search Committee for Vice President and Dean, Graduate School of Biomedical Sciences
- 2013 – present Member, Institutional Office of Regulated Nonclinical Studies, UTMB/FDA development of Assuring Data Integrity through Quality Systems in Maximum Containment Laboratories Pilot Course
- 2012 Member, Search Committee, Animal Resource Center Director
- 2009 –2012 UTMB Faculty Senate

Departmental:

2007- Present	Member, Executive Committee, Institute for Human Infections and Immunity
2007-2010; 2012-2014	Member, Appointments, Promotion and Tenure (APT) committee, Department of Microbiology and Immunology

TEACHING RESPONSIBILITIES:

Ad hoc lecturer in epidemiology of infectious diseases, global health.

HONORS:

2016	National Associate, National Research Council, National Academy of Sciences (lifetime award)
2016	Ho Wang Lee Award for lifetime achievement; International Society for Hantaviruses
2013-Present	John Sealy Distinguished Chair in Tropical and Emerging Virology UTMB
2006-2013	Robert E. Shope, MD and John S. Dunn Distinguished Chair in Global Health, UTMB
2010	Honorary Life Member, American Society of Tropical Medicine and Hygiene
2007	Ambassador, Paul G. Rogers Society for Global Health Research
2006	STAR recruitment award, University of Texas System
2005	UCLA School of Public Health Hall of Fame
2005-Present	Fellow, Infectious Diseases Society of America
2004	CDC Charles C. Shepard Science Award
2004	The Pfizer Guide to Careers in Public Health: "Tropical Disease Specialist" in Advancing Healthy Populations: pp165-170.
2002, 2004	CDC Nakano Citations
2002	Advanced to Senior Biomedical Research Service, CDC
1992	C. J. Peters Award (Honorary award from United States Army Medical Research Institute of Infectious Diseases)
1990	Nathaniel Young Award (Honorary award from American Committee on Arthropod-borne Viruses)
1989	"A" Proficiency Designator Award, United States Army
1989	Order of Military Medical Merit
1985	U.S. Army Research and Development Achievement Award
1975	Recipient of US Army Scholarship for Graduate Education (Doctoral Degree)

1974	<u>The Paul A. Siple Award</u> for the outstanding contribution to the 1974 Army Science Conference
1971	Recipient of US Army Scholarship for Graduate Education (Masters Degree)
1969-1992	Various Military awards and decorations

CONGRESSIONAL TESTIMONY:

“Emerging Infections: A Significant Threat to the Nation’s Health” Hearing before the U.S. Senate. Statement of James W. LeDuc, Ph.D., Medical Officer, World Health Organization, 18 October 1995.

"Combating Terrorism: Federal Response to a Biological Weapons Attack." Hearing before the U.S. House of Representatives. Statement of James M. Hughes, M.D, accompanied by James W. LeDuc, Ph.D., Acting Director, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention, July 23, 2001.

“Smallpox” Hearing before the U.S. Senate. Statement of James W. LeDuc, Ph.D., Director, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC, 2 Nov 2001.

“Pandemic Planning and Preparedness” Statement of James W. LeDuc, Ph.D., Director, Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC, 30 June 2005, testimony before the Government Reform Committee, U.S. House of Representatives.

“Avian Influenza A (H5N1): Update and Preparedness Actions Related to Tourism and Trade” Statement of James W. LeDuc, Ph.D. Coordinator for Influenza, Centers for Disease Control and Prevention. Hearing before the U.S. Senate, 22 June 2006.

STATE LEGISLATURE TESTIMONY:

Texas Senate Bill SB2556. Statement of James W. LeDuc, PhD, Professor, University of Texas Medical Branch, Galveston, TX. Hearing before the State Senate, 28 April 2009.

Texas Senate Committee on Health and Human Services hearing on public health preparedness for infectious diseases. Testimony of James W. Le Duc, Director, Galveston National Laboratory, University of Texas Medical Branch, 7 October 2014.

Texas House Committee on Public Health hearing on Preparedness for Public Health Threats. Testimony of James W. Le Duc, Director, Galveston National Laboratory, University of Texas Medical Branch, 10 February 2016.

WORLD HEALTH ASSEMBLY RESOLUTIONS (authors hip not attributed)

WHA46.31 Dengue Fever and Dengue Hemorrhagic Fever Prevention and Control (secondary author with A.B. Knudsen)

WHA48.7 Revision of the International Health Regulations (primary author with R. Henderson)

WHA48.13 New, Emerging and Re-Emerging Infectious Diseases (sole author)

NATIONAL ACADEMY OF SCIENCES/NATIONAL RESEARCH COUNCIL/NATIONAL

ACADEMY OF MEDICINE (IOM) REPORTS:

Epidemiology in Military and Veteran Populations: proceedings of the Second Biennial Conference March 7, 1990. LeDuc, JW, Childs, JE, Glass, GE, Watson, AJ. (1991) Hemorrhagic fever with renal syndrome: Past accomplishments and future challenges. Institute of Medicine, pp 35-48. (Speaker and contributor)

Learning from SARS, preparing for the next disease outbreak. LeDuc JW, Pflieger A, (2004) The Centers for Disease Control and Prevention's role in international coordination and collaboration in response to the SARS outbreak. Institute of Medicine, pp 50-56. (Speaker and contributor)

Biological Science and Biotechnology in Russia: Enhancing Public Health and Security, National Academy of Sciences, 2005. (Committee member)

The Biological Threat Reduction Program of the Department of Defense; from foreign assistance to sustained partnerships, National Research Council of the National Academy of Sciences, 2007. (Committee member)

Ethical and Legal Considerations in Mitigating Pandemic Disease. LeDuc JW, Barrett DH, Moulton AD, Goodman RA, Kinlaw K, Levine R J (2007) Ethical and Legal Considerations in Preparing for pandemic influenza. Institute of Medicine, pp 90-98. (Panelist and contributor)

Global Security Engagement: A new model for Cooperative Threat Reduction, National Academy of Sciences, 2009. (Committee member)

Sequence-Based Classification of Select Agents: A Brighter Line, National Research Council of the National Academy of Sciences, 2010. (Chair)

Biosecurity challenges of the global expansion of high-containment biological laboratories. (Member of briefing team to BWC, Geneva, December 2011) National Academy of Sciences and National Research Council, 2012. (Committee member)

Evaluation of the Updated Site-Specific Risk Assessment for the National Bio- and Agro-defense Facility in Manhattan, Kansas, National Research Council, 2012. (Reviewer)

An Analysis of the Requirements and Alternatives for Foreign Animal and Zoonotic Disease Research and Diagnostic Laboratory Capabilities, National Research Council of the National Academy of Sciences, 2012. (Committee member)

The Unique U.S.-Russian Relationship in Biological Science and Biotechnology: Recent Experience and Future Directions. US-Russian Cooperation in Biological Sciences, 2010-2012. National Research Council of the National Academy of Sciences in cooperation with the Russian Academy of Sciences, 2013. (Committee member)

Research Priorities to Inform Public Health and Medical Practice for Ebola Virus Diseases—Workshop in Brief. Presentation: “Existing knowledge of Ebola and the 2014 EVD Outbreak.” November, 2014. Institute of Medicine and National Research Council of the National Academy of Sciences, 2014. (Speaker and Discussant)

Challenges of Emerging Infections and Global Health Safety. Indian National Academy of Sciences and U.S. National Academy of Sciences Workshop Report, 2014, National Academy of Sciences. (U.S. Chair)

National Academy of Sciences Second Regional Meeting of the Committee on Federal Regulations and Reporting Requirements: A New Framework for Research Universities in the 21st Century. Le Duc, James. “Select Agents.” Rice University, 29-30 October 2015. (Speaker and panelist)

Indo-U.S. Workshop on Building Regional Capacity to Tackle Challenges of Emerging Infectious and Global Health Safety, Seychelles, 9-12 May 2016. Joint National Academy of Sciences-India National Science Academy workshop, (U.S. Chair)

Dual Use Research of Concern in the Life Sciences: Current Issues and Controversies. National Academies of Sciences, Engineering and Medicine, 2017. (Committee member)

Second China-U.S. Workshop on the Challenges of Emerging Infections, Laboratory Safety and Global Health Security, Wuhan, China, 17-19 May 2017. Chinese Academy of Sciences and the U.S. National Academy of Sciences. (Co-organizer for U.S. and Speaker)

Symposium on Cooperative Threat Reduction (CTR) for the next ten years and beyond. National Academy of Sciences Committee on International Security and Arms Control, 18-19 September 2017. "The proliferation of technical expertise in biological sciences" (Speaker)

Third China-U.S. Workshop on the Challenges of Emerging Infections, Laboratory Safety and Global Health Security, Galveston, Texas, U.S.A., 16-18 January 2018. Chinese Academy of Sciences and the U.S. National Academy of Sciences. (Co-Organizer for U.S. and local host, Speaker)

PUBLICATIONS:

A. ARTICLES IN PEER-REVIEWED JOURNALS:

1. **LeDuc JW**, Suyemoto W, Eldridge BF, Saugstad ES (1972) Ecology of arboviruses in a Maryland freshwater swamp. II. Blood feeding patterns of potential mosquito vectors. *Am. J. Epidemiol.* 96 (2): 123-128.
2. **LeDuc JW** (1973) Distribution of potential mosquito vectors in the Imperial Valley of California. 1971-72. *Mosquito News*, 33 (4):594-599.
3. **LeDuc JW**, Suyemoto W, Eldridge BF, Russell PK (1975) Transovarial transmission of California encephalitis virus by floodwater mosquitoes. *Proc. 1974 Army Sci. Conf.*, Vol. 2., pp 193-200.
4. **LeDuc JW**, Suyemoto W, Keefe TJ, Burger JF, Eldridge BF, Russell PK (1975) Ecology of California encephalitis viruses on the DelMarVa Peninsula. I. Virus isolations from mosquitoes. *Am. J. Trop. Med. Hyg.* 24 (1):118-123.
5. **LeDuc JW**, Suyemoto W, Eldridge BF, Russell PK, Barr AR (1975) Ecology of California encephalitis viruses on the DelMarVa Peninsula. II. Demonstration of transovarial transmission. *Am. J. Trop. Med. Hyg.* 24 (1):124-126.
6. **LeDuc JW**, Burger JF, Eldridge BF, Russell PK (1975) Ecology of Keystone virus, a transovarially maintained arbovirus. *Annals of New York Academy of Sciences*, 266:144-151.
7. Fine PEM, **LeDuc JW** (1978) Towards a quantitative understanding of the epidemiology of Keystone virus in the Eastern United States. *Am. J. Trop. Med. Hyg.* 27:322-338.
8. **LeDuc JW** (1978) Natural transmission of Keystone virus to sentinel rabbits on the DelMarVa Peninsula. *Am. J. Trop. Med. Hyg.* 27:1041-1044.
9. Pinheiro FP, Travassos da Rosa APA, Travassos da Rosa JF, Freitas RB, Mello WA, **LeDuc JW** (1978) Epidemias simultaneas de Mayaro e Febre Amarela em Belterra, Para. *Boletim Epidemiologico do Fundacao Servicos de Saude Publica*. 16:145-152. (in Portuguese)

10. **LeDuc JW** (1979) The ecology of California group viruses. *J. Med. Entomol.* 16:1-17.
11. Pinheiro FP, Travassos da Rosa APA, Travassos da Rosa JFS, Ishak R, Freitas RB, Gomes MLC, **LeDuc JW**, Oliva OFP (1981) Oropouche Virus. I. A review of clinical, epidemiological and ecological findings. *Am. J. Trop. Med. Hyg.* 30:149-160.
12. Pinheiro FP, **LeDuc JW**, Travassos da Rosa APA, Leite OF (1981) Isolation of St. Louis Encephalitis virus from a patient in Belem, Brazil. *Am. J. Trop. Med. Hyg.* 30:145-148.
13. Dutary BE, **LeDuc JW** (1981) Transovarial transmission of Yellow Fever virus by a sylvatic vector, *Haemagogus equinus*. *Trans. R. Soc. Trop. Med. Hyg.* 75:128.
14. Pinheiro FP, Freitas RB, Travassos da Rosa APA, Gabbay YB, Mello WA, **LeDuc JW** (1981) An outbreak of Mayaro virus disease in Belterra, Brazil. I. Clinical and virologic findings. *Am. J. Trop. Med. Hyg.* 30:674-681.
15. **LeDuc JW**, Pinheiro FP, Travassos da Rosa APA (1981) An outbreak of Mayaro virus disease in Belterra, Brazil. II. Epidemiology. *Am. J. Trop. Med. Hyg.* 30:682-688.
16. Hoch AL, Peterson NE, **LeDuc JW**, Pinheiro FP (1981) An outbreak of Mayaro virus disease in Belterra, Brazil. III. Entomological and ecological studies. *Am. J. Trop. Med. Hyg.* 30:689-698.
17. **LeDuc JW**, Hoch AL, Pinheiro FP, Travassos da Rosa APA (1981) Epidemic Oropouche virus disease in northern Brazil. *Bull. Pan. Am. Health Organ.* 15:97-103.
18. **LeDuc JW**, Hoch AL, Pinheiro FP, Travassos da Rosa APA (1982) Enfermedades epidemicas causadas por el virus Oropouche en el norte de Brasil. *Boletin Organizacion Panamericana de la Salud.* 92:143-152.
19. **LeDuc JW**, Escajadillo A, Lemon SM (1982) Hepatitis A virus among captive Panamanian Owl Monkeys. *Lancet* 2:1427-1428.
20. Pinheiro FP, **LeDuc JW**, Rosa APAT, Gomes MLC, Hoch AL (1982) Transmission of Oropouche virus from man to hamsters by the midge *Culicoides paraensis*. *Science* 215:1251-1253.
21. **LeDuc JW**, Smith GA, Bagley LR, Hasty SE, Johnson KM (1982) Preliminary evidence that Hantaan or a closely related virus is enzootic in domestic rodents. *N. Engl. J. of Med.* 307:624.
22. Lemon SM, **LeDuc JW**, Binn LN (1982) Isolation of hepatitis A virus from the New World Owl Monkey: A new model for Hepatitis A infections. *Army Sci. Conf. Proc.*, 15-18 June 1982, Volume 2, p. 249-262.
23. Lemon SM, **LeDuc JW**, Binn LN, Escajadillo A, Ishak KG (1982) Transmission of Hepatitis A virus among recently capture Panamanian Owl Monkeys. *J. Med. Virol.* 10:25-36.
24. **LeDuc JW**, Smith GA, Bagley LR, Hasty SE, Johnson KM (1982) Antigen and antibody to Hantaan virus, causative agent of Korean hemorrhagic fever, found in domestic rodents in the USA. *Proc. Conf. Viral Dis., US-Japan Coop. Med. Sci. Prog.*, 31-32.
25. Watts DM, **LeDuc JW**, Bailey CL, Dalrymple JM, Gargan TP (1983) Serologic evidence of Jamestown Canyon and Keystone virus infection in vertebrates of the DelMarVa Peninsula. *Am. J. Trop. Med. Hyg.* 31:1245-1251.
26. **LeDuc JW**, Lemon SM, Keenan CM, Graham RR, Marchwicki RH, Binn LN (1983) Experimental

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