

**Biographical Sketch**

Provide the following information for the key personnel in the order listed for Form Page 2.

Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME	POSITION TITLE
L. Garry Adams	Professor, Veterinary Pathology, Veterinary Pathobiology, and Associate Dean of Research & Graduate Studies, College of Veterinary Medicine, Texas A&M University

  

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE	YEAR(S)	FIELD OF STUDY
Tarleton State University	A. S.	1961	Biology
Texas A&M University	B. S.	1963	Animal Science (cum laude)
Texas A&M University	D. V. M.	1964	Veterinary Medicine (cum laude)
Texas A&M University	Ph. D.	1968	Veterinary Pathology
American College of Veterinary Pathologists	Diplomate	1970	Anatomic Veterinary Pathology

**NOTE: The Biographical Sketch may not exceed four pages. Items A and B may not exceed two of the four-page limit.****A. Positions and Honors.** List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.**ACADEMIC APPOINTMENTS:**

Aug. 1964 - Jan. 1968	NIH Post-Doctoral Fellow, Dept. of Veterinary Pathology, Texas A&M University
Feb. 1968 - Sept. 1974	Assistant Professor, Dept. of Veterinary Pathology & Institute of Tropical Medicine, Texas A&M University
Sept. 1974 - Aug. 1978	Associate Professor, Dept. of Veterinary Pathology, Texas A&M University
Sept. 1978 - Present	Professor, Dept. of Veterinary Pathobiology, Texas A&M University
July 1990 - Jan. 1991	Visiting Professor, Institut für Mikrobiologie, Universität Ulm, Ulm, Germany. Prof. Dr. S. H. E. Kaufmann - Macrophage Function
Jan. 1991 - June, 1991	Visiting Professor, McGill University, Montréal General Hospital, Montréal, Canada. Prof. Emil Skámene - Molecular Genetics of Natural Disease Resistance
July 1999 – present	Associate Dean for Research, College of Veterinary Medicine

**HONORS AND AWARDS:**

1964	Phi Kappa Phi & Phi Zeta
1970	Diplomate, American College of Veterinary Pathologists
1976	Texas Veterinary Medical Association Faculty Achievement Award for Research
1984	Texas A&M University System, Team Research Award
1985	SmithKlineBeecham Award for Research Excellence
1986	Distinguished Faculty Achievement Award for Research, Texas A&M University System, Gamma Sigma Delta & Sigma Xi
1989	USDA National Superior Service Award for Outstanding Research & Phi Beta Delta
1994	American Veterinary Medical Association Research Award
1998	Academia Veterinaria Mexicana, Elected Full Member
1999	Faculty Fellow, Texas Agricultural Experiment Station
1981-present	<i>American Journal of Veterinary Research</i> and <i>Journal of American Veterinary Medical Association</i>
1983-present	<i>Veterinary Pathology</i>
1996-present	Scientific Editor, <i>Infection &amp; Immunity</i>
1996-present	Scientific Reviewer, <i>FEMS Newsletters Microbiology</i>
1996	DOD/USAMRDC <i>Brucella</i> Research Review
1999-present	<i>ad hoc</i> Reviewer, <i>Journal of Clinical Microbiology</i> , <i>Tubercle and Lung Disease</i> , <i>Veterinary Immunology and Immunopathology</i>
2000-present	Scientific Reviewer, U.S. Civilian Research and Development Foundation for the Independent States of the Former Soviet Union, Moscow, and Swiss National Research Foundation, Bern, and The Wellcome Trust, London

**B. Selected (>180) peer-reviewed publications (in reverse chronological order).** Do not include publications submitted or in preparation.

1. Raffatellu, M., Renato L. Santos, Daniela Chessa, R. Paul Wilson, Sebastian Winter, Charles L. Bevins, L. Garry Adams and Andreas J. Bäuml. The capsule encoding *viaB* locus reduces IL-17 and mucosal innate responses in the bovine intestinal mucosa during infection with *Salmonella enterica* serotype Typhi. *Mol. Micro.* In Press, 2007.

2. Roux, C.M., H. G. Rolán, P. D. Beremand, T. L. Thomas, L. G. Adams and R. M. Tsolis. *Brucella* requires a functional Type IV secretion system to elicit innate immune responses in mice. *Cellular Microbiology*. 9:1851-1869, 2007.
3. Khare, Sangeeta, Mary K. Hondalus, Jairo Nunes, Barry R. Bloom, and L. Garry Adams. *Mycobacterium bovis*  $\Delta$ leuD auxotroph-induced protective immunity against tissue colonization, burden and distribution of cattle intranasally challenged with *Mycobacterium bovis* Ravenel. *Vaccine*. 25:1743-55, 2007.
4. Vega-Manriquez, X., Lopéz-Vidal, Y., Adams, L. G., and Gutiérrez-Pabello, J. A. Apoptosis-Inducing Factor Participation in Bovine Macrophage *Mycobacterium bovis*-Induced Caspase-Independent Cell Death. *Infection & Immunity*. 75:123-128, 2007.
5. Westhusin, M. E., T. Shin, J. W. Templeton, R. C. Burghardt and L. G. Adams. Rescuing valuable genomes by animal cloning: a case for natural disease resistance in cattle. *Journal of Animal Science*. 85:138-42, 2007.
6. Kahl-McDonagh, M.M., Elzer, P.H., Hagius, S.D., Walker, J.V., Perry, Q.L., Seabury, C.M., denHartigh, A.B., Tsolis, R.M., Adams, L.G., Davis, D.S. and Ficht, T.A. Evaluation of Novel *Brucella melitensis* Unmarked Deletion Mutants for Safety and Efficacy in the Goat Model of Brucellosis. *Vaccine* 24:5169-5177, 2006.
7. Raffatellu, M., Sun, Y.H., Watson, R. P., Tran, Q. T., Chessa, D., Andrews-Polymenis, H. L., Lawhon, S. D., Figueiredo, J. F., Tsolis, R. M., Adams, L. G. and Bäumlner, A. J. Host Restriction of *Salmonella enterica* Serotype Typhi Is Not Caused by Functional Alteration of SipA, SopB, or SopD. *Infection & Immunity* 73:7817-7826, 2005.
8. Tükel, C., Raffatellu, M., Humphries, A. D., Wilson, R. P., Andrews-Polymenis, H., L., Gull, T., Figueiredo, J. F., Wong, M.H., Michelsen, K.S., Akçelik, M., Adams, L. G. and Bäumlner, A. J. CsgA is a pathogen-associated molecular pattern of *Salmonella enterica* serotype Typhimurium that is recognized by Toll-like receptor 2. *Molecular Microbiology* 58:289-304, 2005.
9. Raffatellu, M., R. Paul Wilson, Daniela Chessa, Helene Andrews-Polymenis, Quynh T. Tran, Sara Lawhon, Sangeeta Khare, L. Garry Adams and Andreas J. Bäumlner SipA, SopA, SopB, SopD and SopE2 contribute to *Salmonella enterica* serotype Typhimurium invasion of epithelial cells. *Infection & Immunity* 73:146-154, 2005.
10. Khare, Sangeeta, Thomas A Ficht, Renato L. Santos, Juan Romano, Allison R Ficht, Shuping Zhang, Irene R Grant, Melissa Libal, David Hunter, and L. Garry Adams. Rapid and sensitive detection of *Mycobacterium avium* subsp. *paratuberculosis* in bovine and American Bison milk and fecal samples by an immunomagnetic bead-real time PCR. *Journal of Clinical Microbiology*. 42:1075-1081, 2004.
11. Andrews-Polymenis, Helene L., Wolfgang Rabsch, Steffen Porwollik, Michael McClelland, Carlos Rosetti, L. Garry Adams and Andreas J. Bäumlner. Host restriction of *Salmonella enterica* serotype Typhimurium pigeon isolates does not correlate with loss of discrete genes. *J. Bacteriology*. 186:2619-28. 2004.
12. Caron, Judith, Danielle Malo, Christopher Schutta, Joe W. Templeton, and L. Garry Adams. Genetic susceptibility to infectious diseases linked to *NRAMP1* gene in farm animals. *The Nramp Family*, (eds) Mathieu Cellier and Philippe Gros. Landes Bioscience. Kluwer Academic/Plenum Publishers, Georgetown, TX. 2004. pp. 16-28.
13. Ficht, T.A., L.G. Adams, S. Khare, B. O'Shea and A.C. Rice-Ficht. Global Analysis of the *Mycobacterium avium* subsp. *paratuberculosis* Genome and Model Systems Exploring Host-Agent Interaction. In "Preharvest and Postharvest Food Safety: Contemporary Issues and Future Directions," R. C. Beier, S. D. Pillai, T. D. Phillips, R. L. Ziprin (Eds.). Blackwell Publishing, Ames, IA, 2004. pp. 87-99.
14. O'Shea, B., Khare, S., Bliss, K., Klein, P., Ficht, T. A., Adams, L. G., Rice-Ficht, A. C. Genotyping and Characterization of *Mycobacterium avium* subsp. *paratuberculosis* Using Amplified Fragment Length Polymorphism. 2004. *Journal of Clinical Microbiology*. 42:3600-3606.
15. Reis, P. Bruno Shuping Zhang, Renée M. Tsolis, Andreas J. Bäumlner, L. Garry Adams, Renato L. Santos. The attenuated *sopB* mutant of *Salmonella enterica* serovar Typhimurium has the same tissue distribution and host chemokine response as the wild type in bovine Peyer's patches. *Veterinary Microbiology*. 97:269-277, 2004.
16. Zhang, Shuping, Adams, L. Garry, Nunes, Jairo, Khare, S., Tsolis, Renée M, and Bäumlner, Andreas J. Secreted effector proteins of *Salmonella enterica* serotype Typhimurium elicit host specific chemokine profiles in animal models of typhoid fever and enterocolitis. *Infection & Immunity*. 71:4795-4803, 2003.
17. Humphries, A. D., Raffatellu, M., Winter, S., Weening, E. H., Kingsley, R. A., Droleskey, R., Zhang, S., Figueiredo, J., Khare, S., Nunes, J., Adams, L. G., Tsolis, R. M. and Bäumlner, A. J. The use of flow cytometry to detect in vitro expression of subunits encoded by 11 *Salmonella enterica* serotype Typhimurium fimbrial operons. *Molecular Microbiology*. 48:1357-1376, 2003.
18. Zhang, S., Kingsley, R. A., Santos, R. L., Andrews-Polymenis, H., Raffatellu, M., Figueiredo, J. Nunes, J., Adams, L. G., Bäumlner, A. B. Molecular Pathogenesis of *Salmonella enterica* Serotype Typhimurium-induced Diarrhea. *Infection & Immunity*, 71:1-12, 2003.
19. Santos, R. L., R. M. Tsolis, A. J. Bäumlner, and L. G. Adams. Pathogenesis of *Salmonella*-induced enteritis. *Brazilian Journal of Medical and Biological Research*. 36:3-12, 2003.
20. Adams, L. G. The Pathology of Brucellosis Reflects the Outcome of the Battle between the Host Genome and the *Brucella* Genome. *Veterinary Microbiology*. 90:553-561, 2002.
21. Zhang, S., Santos, R. L., Tsolis, R. M., Mirolid, S., Hardt, W-D., Adams, L. G., Bäumlner, A. J. Phage mediated horizontal transfer of the *SopE1* gene increase enteropathogenicity of *Salmonella enterica* serotype Typhimurium for calves. *FEMS Microbiology Letters* 10749:1-5, 2002.

**C. Research Support.** List selected ongoing or completed (during the last three years) research projects (federal and non-federal support). Begin with the projects that are most relevant to the research proposed in this application. Briefly indicate the overall goals of the projects and responsibilities of principal investigator identified above.

**PENDING:**

R01 A New Target to Attenuate Salmonella Typhimurium. Ashok Chopra, University of Texas-Medical Branch (PI), L. Garry Adams (Co-PI). 07/12.

R01 HOST Interactions of Salmonella Typhimurium. Andreas Bäumlér, Univ. Calif. - Davis (PI), L. Garry Adams (Co-PI). 07/12.

U01AI075508-01 Novel Mechanism of Action Therapeutics for Category B Bacterial Pathogens. Ania Knap, MaxThera, Inc. (PI), L. Garry Adams (Co-PI). 07/12.

**CURRENT RESEARCH:**

US DHS BAA (Clarke, N. P, PI, Adams, LG Co-PI). The National Center for Foreign Animal and Zoonotic Disease Defense. 04/07.

NIH/NIAID (Walker, DH-PI) Subcontract: Adams, L.G. Region VI Center of Excellence in Biodefense, Project 5 Western Regional Center of Excellence for Biodefense & Emerging Infectious Diseases. 03/08.

NIH (Bäumlér, AJ PI & Adams, LG Co-I). Bovine-specific virulence factors of Salmonella typhimurium 03/08.

USDA/ARS (Adams, L G PI, Fosgate, Geoffrey Co-PI) 58- High Consequence Pathogen Detection. 03/07.

DHHS/NIH/NCRR T-35 Training Grant (Adams, LG-PI). Veterinary Medical Student Research Training. 04/09.

US Department of Defense, Defense Threat Reduction Agency, Ecology of Brucella biotypes within southern Kazakhstan. Adams, L. G. (PI). 07/09.